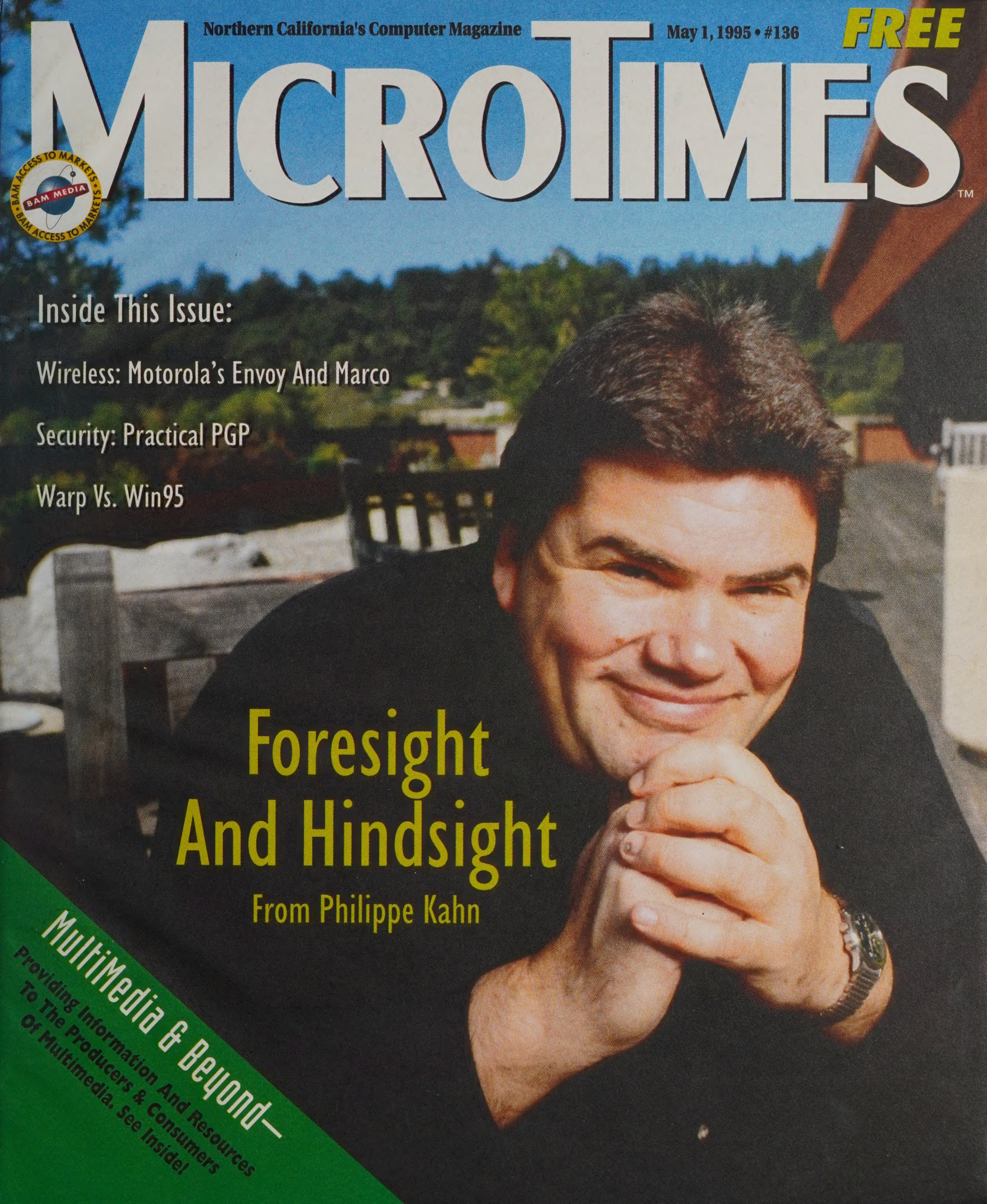
Northern California's Computer Magazine

May 1, 1995 • #136

FREE

MICROTIMES™



Inside This Issue:

Wireless: Motorola's Envoy And Marco

Security: Practical PGP

Warp Vs. Win95

Foresight And Hindsight

From Philippe Kahn

MultiMedia & Beyond—

Providing Information And Resources To The Producers & Consumers Of Multimedia. See Inside!

COMPAQ

COMPAQ

BUILT-IN SVGA COLOR DISPLAY

486DX2 66MHz

PRESARIO 524CDS 420MB MULTIMEDIA SYSTEM

486DX2-66MHz CPU • 420MB Hard Drive • 4MB RAM
14,400 BPS Internal Fax/Modem • Internal CD-ROM
Built-in 14" SVGA Display • MS DOS • MS Windows
#1990674

$1795

COMPAQ

BUILT-IN SVGA COLOR DISPLAY

486SX2 66MHz

PRESARIO 520 CDTV 420MB MULTIMEDIA SYSTEM

486SX2-66MHz CPU • 420MB Hard Drive • 4MB RAM • 14,400 BPS Internal Fax/Modem
1.44MB Floppy Drive • Cable TV/VCR Card with Freeze and Zoom Special Effects
Internal Double-Speed CD-ROM • Personal Message Center • Built-in 14" SVGA Display
Telephone Answering Machine • Speakerphone • MS DOS • MS Windows
#1947045

$1695

COMPAQ

PENTIUM 75MHz

PRESARIO 972 CDS 735MB MULTIMEDIA SYSTEM

Pentium 75MHz CPU • 8MB RAM • 735MB Hard Disk
Internal Quad-Speed CD-ROM • 14,400 Fax/Modem with Answering Machine
Sound Card • Speakers • **Monitor Sold Separately**
#1998018

$2149

intel inside pentium PROCESSOR

COMPAQ

486DX2 40MHz

CONTURA 400CX 250MB ACTIVE COLOR NOTEBOOK

486DX2 40MHz CPU • 250MB Hard Drive • 4MB RAM
3.5" 1.44MB Floppy Drive • Active Matrix Color • PCMCIA • Trackball
#1962747

$2699

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

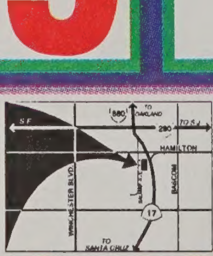
Fry's ELECTRONICS

Prices Good Through May 23, 1995

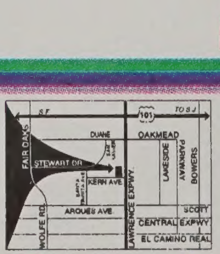
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

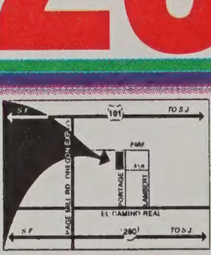
CORPORATE P.O. FAX #


S F
880
TO OAKLAND
280
TO S J
HAMILTON
WINCHESTER BLVD.
BASCOM
17
TO SANTA CRUZ

Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595


S F
101
TO S J
DUANE
OAKMEAD
FAIR OAKS
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
WOLFE RD
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950


S F
101
TO S J
PARK
PAGE MILL RD. OREGON EXPWY
PORTAGE
LAMBERT
EL CAMINO REAL
S F
280
TO S J

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044

AUTOMALL PARKWAY
PLEASANTON
MISSION CT
680
MISSION BLVD
880
237
CALAVERAS
SAN JOSE
MILPITAS
N. MILPITAS / WARM SPRINGS BLVD

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

DISCOVER NOVUS
VISA
MasterCard

DISCOVER, VISA AND MasterCard ACCEPTED

SCSI SOLUTIONS SALE

CERTIFIED AUDIO VISUAL COMPLIANT

512K CACHE
2000MB-$549
EXTERNAL - $649

512K CACHE
3000MB-$895
EXTERNAL - $995

512K CACHE
3500MB-$1095
EXTERNAL - $1195

512K CACHE
4000MB-$1395
EXTERNAL - $1495

CSC COMPATIBILITY GUIDE: 386/486/Pentium PC · Power Mac or PC · IBM PS/2 SCSI · SUN Sparcstation · DEC Alpha

CSC carries all the controllers, cables, brackets and software you need for quick and easy installation

Plug one of these DDD drives into your SCSI-II system and get SCSI-III performance immediately. The secret is the cache. The full 16-bit wide 512K cache stores data and can even "read ahead", loading data before your system requests it. Applications run FASTER, with better PERFORMANCE and RELIABILITY. Upgrade your system today. You must be satisfied or we'll refund the purchase price of the drive.

FAST SCSI-II

ONE YEAR BRAND NEW WARRANTY

DDD OPTICAL DISK SALE

Who Needs Optical? You do. Here's why.

1. You get unlimited capacity.
Run out of room on your hard disk, and it's time to buy a new one. With optical, you just pop in another inexpensive cartridge.

2. You get portability
You can slip 1,300 Megabytes in your shirt pocket or 13,000 megabytes in your briefcase. Optical cartridges are small, light, and rugged. Standard double sided 650MB and 1GB optical disks are used by thousands of major corporations and graphic service bureaus across the country. *They can read your disks now!* Millions of megabytes of databases, programs, and graphic files are shipped safely every day on optical media. Would you rather ship 25 SyQuest™ cartridges or one optical disk?

3. You get performance and reliability.
Optical technology is approaching the performance of hard disks. You can actually run programs from your optical drive with great performance. Experts in graphics design, digital audio and video insist on DDD optical drives.

4. You get the ultimate backup and retrieval system.
When your hard disk fills up, just off-load files to the optical drive. You can retrieve files instantly and you can *run programs from your optical drive.* Your only other reliable backup alternative is DAT tape. DAT works well, but it can take hours to backup and restore your files. And you'll never be able to run programs from a DAT tape. If you're transporting large files, backing up critical data, working with an advanced operating system, or just plain out of hard disk space, *there's no substitute for a fast optical drive.*

CSC COMPATIBILITY GUIDE: 386/486/Pentium PC · Power Mac or PC · IBM PS/2 SCSI · SUN Sparcstation · DEC Alpha

CSC carries all the controllers, cables, brackets and software you need for quick and easy installation

THE DDD OPTICAL DISK FAMILY

1000MB	1000MB	1300MB
1MB cache	4MB cache	1MB cache
$895	$1095	$1495

AS LOW AS
$895!

2100 MB SCSI-II

$695

CSC COMPATIBILITY GUIDE: 386/486/Pentium PC · Power Mac or PC · IBM PS/2 SCSI · SUN Sparcstation · DEC Alpha

CSC carries all the controllers, cables, brackets and software you need for quick and easy installation

ONE YEAR BRAND NEW WARRANTY

2100 Megabyte 5400 RPM

- Fast 5400 RPM spindle speed.
- Fast 10MB/sec data transfer rate.
- Legendary Micropolis reliability.
- Brand new, one year warranty.
- Complete plug and play external system.

Why worry about disk space? Let your machine fly through disk intensive graphic applications at screaming speeds. Get more done in less time. Depend on rugged Micropolis reliability to keep your data secure. Upgrade to FAST SCSI-II performance with a drive that's built for graphic workstations and network servers.

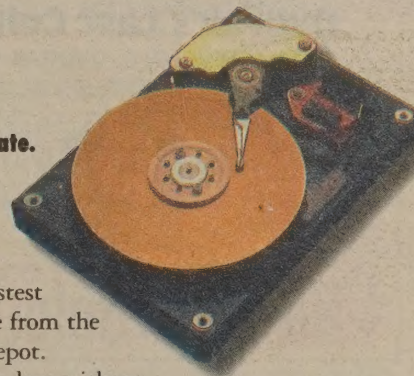
FASTEST DRIVE IN CAPTIVITY

$219

$195-IDE

MAXTOR 540

- FAST 6300RPM spindle speed.
- Blazing 7.5ms access time.
- 10MB/sec FAST SCSI-II transfer rate.
- Low profile 3½" form factor.
- IDE version available.



Get more done in less time with a fast Maxtor drive. Fly through graphic applications with a blazing 7.5ms access time. Get the performance and reliability you need today. Our special purchase of factory reconditioned units gives you a real MXT drive for the price of a low performance 12ms unit.

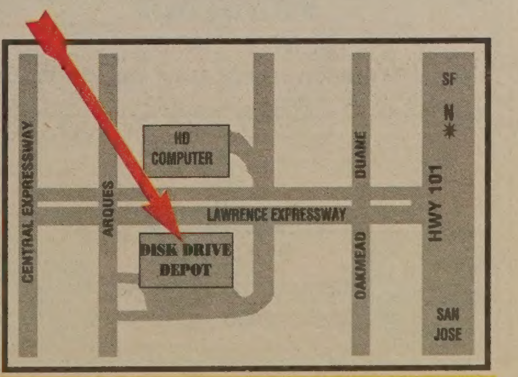
Stop by today and get the fastest drive available from the Disk Drive Depot. Try one for 15 days without risk. You won't be disappointed.

Disk•Drive•Depot

500 Lawrence Expressway
Sunnyvale, CA 94086
(408) 738-3895
FAX (408) 738-3896

NEW STORE HOURS:
Monday-Saturday 10:30am to 6:30pm

We Honor VISA MasterCard



STOP BY DDD TODAY FOR THE LOWEST PRICES AND THE HIGHEST QUALITY AVAILABLE

Contents

MICROTIMES™
May 1, 1995 • Issue #136

COVER STORY

Page 168
Foresight (And Hindsight) From Philippe Kahn
BY MARY EISENHART
PHOTOS BY TUSTIN ELLISON
Philippe Kahn on the lessons of Borland and the promise of new ventures.

News & Views

12
Industry Insights
BY PAUL HOFFMAN
Making Sense of Microsoft 12
MicroTimes Stock Index. 18

23
Realizable Fantasies
BY JIM WARREN
They're *our* public records and we still want them—*now!*

354
Dvorak's Last Column
BY JOHN C. DVORAK
Is Bill Gates really Freddy Krueger?

Business Solutions

28
Palmtops
BY MITSU HADEISHI
Motorola Envoy combines Magic Cap with wireless communications.

44
Laptops
BY ED KAHN
Datasonix Pereos Tape Backup;
Gateway 2000 Liberty Series.

50
Telecommuting
BY ROBERT MOSKOWITZ
Creating new models for living and working in a networked world.

60
UNIX
BY BENNETT FALK
Tcl Interpreter—a new and useful language for UNIX.

62
Networking
BY PETER JOHN HARRISON
Managing small office networks.

69
Small Office/Home Office
BY BIRRELL WALSH
Conversions and the Joys of Multiple file types.

Online Guide

80
Grace In Cyberspace: The Legacy Of Tom Mandel
BY MARY EISENHART

85
Internet
BY JOHN S. QUARTERMAN AND SMOOT CARL-MITCHELL
Senate Bill 314—A well-meant bad idea.

94
Web Page Listings

New Advertising Section!
Check Out San Francisco Marketplace On Page 247

110
Online Services
BY BILL GRAM-REEFER
CompuServe forges ahead with partners, acquisitions.

Multimedia & Beyond

266
Gulch Gossip
BY JONATHAN E.
Multimedia as a live performance.

276
Multimedia 101
BY JONATHAN E.
Multimedia and the music biz.

280
Creative Control With Bryce And Convolver
BY TONY REVEAUX
HSC's graphic tools unleash new capabilities.

290
Amiga
BY DOUGLAS J. NAKAKIHARA
New products, rumors, and advice.

Domino® COMPUTER

UPGRADE & REPAIRS
Call For Free Estimate

NOTEBOOK

Cool Your System with an IDE Controller VLB w/ IO + 16550 & Fan

$55

YOU BUILD

DOMINO COLOR NOTEBOOK

BUILD YOUR OWN COMPLETE DOMINO 486 DX4/100MHZ 4MB, 265MB HARD DRIVE

$1865

BAREBONE NOTEBOOK START AT $799
(Hard Drive, CPU, Memory Needed)
Includes On-site Service 1st Year

WE BUILD

MULTIMEDIA BUNDLES

- **Panasonic Dual** Speed CD-ROM
- Sound Blaster 16 Sound Card
- Speakers
- 6 CD Titles

$275

- **Teac Quad** Speed CD-ROM
- Sound Blaster 16 Sound Card
- Speakers
- 6 CD Titles

$325

- **NEC Quad** Speed SCSI CD-ROM
- Sound Blaster 16 Sound Card
- Speakers
- 6 CD Titles

$475

Kits Include: Encyclopedia, Animals, US & World Atlas, Chessmaster 4000, Mavis Beacon Teaches Typing

486DX4/100 SYSTEM

- 4MB 256K Cache
- 540MB Hard Drive & VLB EIDE Enhanced Controller
- 1.44MB Floppy Drive
- 14" SVGA Monitor .28 dot pitch & VLB Card w/ 1MB
- Mini Tower Case w/ 230W PS
- 101 Keyboard
- 2 Serial, 1 Parallel & 1 Game Port
- MS DOS 6.22 w/ Manual
- 3-Button Mouse w/ Pad

$1095

PARTS

Pentium PCI 90MHz 256K Motherboard	$165
14.4/14.4 Fax/Modem	$59
Double Speed IDE CD-ROM	$109
SVGA Monitor & Video Card	$245
SVGA Monitor NI 14" .28 dot pitch	$239
SVGA Monitor NI 17"	$695
CPU Upgrades (Intel, AMD, Cyrix)	CALL
Colorado 250MB Tape Backup	$149
486DX4 VLB Motherboard/256K Cache	$105
16 Bit Stereo Sound Card	$55
420MB Tape Backup	$185

COMPLETE MULTIMEDIA COMPUTER

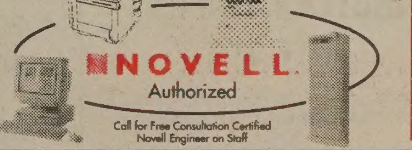
- **486DX4/100MHz Motherboard w/ Intel CPU**
- 8MB 70ns/256K Cache
- 420MB IDE Hard Drive
- 3.5" Teac Floppy Drive
- 14.4 Fax/Modem w/ Software
- 2S/1P/1GP
- 14" SVGA .28 dp Monitor NI
- **Dual Speed CD-ROM Bundle** (See Multimedia Bundles for more info.)
- Windows Accelerator SVGA w/ 1MB
- Medium Tower Case w/ 250W
- 101 Keyboard, 2 Button Mouse
- MS DOS & Windows w/ Manual
- VLB IDE Floppy Controller

$1795

CORPORATE CUSTOMER ON-SITE MAINTENACE CONTRACTS

CALL FOR FREE ON-SITE EVALUATION
(ON-SITE SERVICE AVAILABLE IN THE USA)
WARRANTY AVAILABLE ON ALL BRANDS OF EQUIPMENT

WE SPECIALIZE IN NOVELL AND UNIX NETWORKS



NOVELL.
Authorized
Call for Free Consultation Certified
Novell Engineer on Staff

*
Novell
Certified
NetWare
Engineer

SELF SERVICE CENTERS

BERKELEY/EMERYVILLE
1552 BEACH ST. STE B
510/653-6286

MILLBRAE
231 MILLBRAE AVE. STE. 101
415/259-8080

SAN FRANCISCO
3400 GEARY BLVD.
415/668-9311
OPEN SUNDAY

CONCORD
1130D BURNETT AVE.
510/682-8934

MILPITAS
976 HANSON COURT
408/946-6991

SAN RAFAEL
757 LINCOLN AVE. STE. 30
415/453-8525

LOS ALTOS
307 SECOND ST.
415/941-7778

***SAN RAMON**
2217 SAN RAMON VALLEY BLVD. STE. C
510/820-6022

VALLEJO-NAPA
480 REDWOOD ST. STE. 12
415/668-9311
OPEN SUNDAY

***SANTA ROSA**
1740 SANTA ROSA AVE.
707/523-2055

CLEARANCE CENTER
408/749-0217

8 YEARS IN THE COMPUTER BUSINESS

Domino® COMPUTER
Your Neighborhood Workshop
Service and Upgrade Center

BUSINESS SOLUTION CENTERS

*** FREMONT**
5166 MOWRY AVE.
(510) 713-1199
FAX (510) 713-1193

*** PLEASANTON**
6700 SANTA RITA, STE. D.
(510) 847-1771
FAX (510) 847-1712

*** BLOSSOM HILL, SJ**
461 BLOSSOM HILL RD., UNIT M
(408) 363-1800
FAX (408) 363-1803

ALAMEDA/OAKLAND
1238 HARRISON STREET
(510) 839-1800
FAX (510) 839-1818

SUNNYVALE
1214 APOLLO WAY STE. 404-2
(408) 749-0217

Prices subject to change without notice. We are not responsible for typographical errors.

MEGAMEX™
MEGA Memory EXchange
will recycle
your PC DRAM.

Send us your four old
1Mb 30 pin SIMMs-

1Mb SIMM 1Mb SIMM 1Mb SIMM 1Mb SIMM

4Mb SIMM

we will convert it to one
4Mb 72 pin SIMM for $50!

Why spend more?
Call MEGAMEX™ for details
TEL (415)322-2075 FAX (415)322-8875
1143 Crane Street, Suite 201 • Menlo Park, CA 94025

LOWEST PRICES IN THE BAY AREA

486DX2-66 VLB
$825.00
420HD.1.44FLOPPY DRIVE.MINI TOWER.4RAM.14"SVGA COLOR MONITOR.MOUSE.KEYBOARD.

486DX4-100 VLB
$995.00
540 HD. 1.44 FLOPPY DRIVE.4RAM. MINI TOWER.1MB VIDEO.KEYBOARD.MOUSE.14"SVGA MONITOR.28

PENTUIM90 PCI
$1595.00
730HD.8RAM.1.44FLOPPY.1MB SVGA. PCI/IDE.MID TOWER.KEYBOARD.MOUSE CPU FAN.14"SVGA.28dot MONITOR.

HARD DRIVES
270MB IDE $152.00
420MB IDE $164.00
540MB IDE $182.00
730MB IDE $235.00
1.0GIG IDE $342.00
1.2GIG IDE $375.00
1.0GIG SCSI $549.00

MONITORS
14"SVGA 1024.768 .39 $ 170.00
14"SVGA 1024.768 .28 $ 192.00
15"SVGA 1280.768 .28 $ 272.00

SYSTEM UPGRADE
386 TO 486DX2-66
$249.95

CBM COMPUTERS
117 W.25TH AVE SAN MATEO
415-638-0231 FAX-638-0232

CASH PRICESCREDIT CARDS ADD 2%NOT RESPONSIBLE FOR TYPOS PRICES & AVAILABILITY SUBJECT TO CHANGE WITHOUT NOTICE.

Contents

MICROTIMES™

May 1, 1995 #136

Features

119
Pretty Good Privacy
BY ROBERT MOSKOWITZ
Why you should know about PGP and how to use it.

128
BMUG
BY DAVID MORGENSTERN
System 7.5 tips and more.

154
Win 95 vs. OS/2 WARP
LENNY BAILES
Which upgrade's for you?

Product Spotlight

208
Product Updates

208
Product Reviews
Windows Software
Elastic Reality 208
OrgCharts 210
Educational Software
Shoot Video Like A Pro 212
Typing Instructor 212
Stradiwackius 254
Magic School Bus 256
Games
SimCity 2000. 250
Killing Moon 257

Resources

306
Calendar Of Events
ETHEX: Exploratorium's Ethical Scenarios Forum 306
Novell Open House 206

318
User Group/BBS Listings

338
Classifieds
Career Marketplace 343
Consultants Network 343

350
Index Of Advertisers By City

352
Index Of Advertisers

Micro Marketplace
A Special Advertising Section for Bay Area Computer Buyers
Starts On Page 136

WinBook® XP

Choose the pointing device that works best for you:

OPTIONAL 19MM DUAL-BUTTON TRACKBALL
STANDARD POINTING STICK
OPTIONAL TOUCHPAD

TECHNICAL SPECIFICATIONS

- SL-ENHANCED INTEL 486 DX4-75MHZ OR 486 DX4-100MHZ.
- 5.9 LBS. DUAL-SCAN COLOR OR 6.1 LBS. OPTIONAL ACTIVE MATRIX COLOR
- DIMENSIONS: 11.3" X 8.5" X 1.7"
- 4MB, 8MB OR 16MB RAM (EXPANDABLE UP TO 32MB)
- 3.5" 1.44MB DISKETTE DRIVE
- REMOVABLE 260 TO 810 HDD
- VGA DUAL-SCAN COLOR OR OPTIONAL ACTIVE MATRIX. MONOCHROME UNITS ALSO AVAILABLE
- 10-CELL NIMH BATTERY & AC PACK
- SUSPEND/RESUME FEATURE
- TWO TYPE II OR ONE TYPE III PCMCIA SLOT
- INTEGRATED DUAL-BUTTON POINTING STICK, OPTIONAL DUAL-BUTTON 19MM TRACKBALL OR OPTIONAL DUAL-BUTTON TOUCHPAD
- PARALLEL, SERIAL AND PS/2 PORTS
- 1MB VIDEO MEMORY WITH EXTERNAL VGA PORT
- LCD FUNCTION INDICATOR PANEL
- 14.4 SEND/RECEIVE FAX/VOICE/DATA MODEM OPTIONAL
- INTERNAL AUDIO OPTIONAL
- DOCKING STATION OPTIONAL

AT $1999, IT'S THE ONLY SPEEDING TICKET YOU'LL ENJOY PAYING.

$1999 ....
- Intel 486 DX4-100MHz
- 10.3" dual-scan color display
- 4MB RAM/340MB HD

$4199 ....
- Intel 486 DX4-100MHz
- Active matrix color display
- 16MB RAM/810MB HD
- 14.4 Fax Modem
- DOS and Windows

100MHz $1999

$$ Comparable savings on all other WinBook XPs—from our base models to notebooks for the power user. For current pricing and configurations, call 1-800-293-1642.

PC MAGAZINE EDITORS' CHOICE™
August 1994, WinBook XP DX2/50 4/260 Monochrome

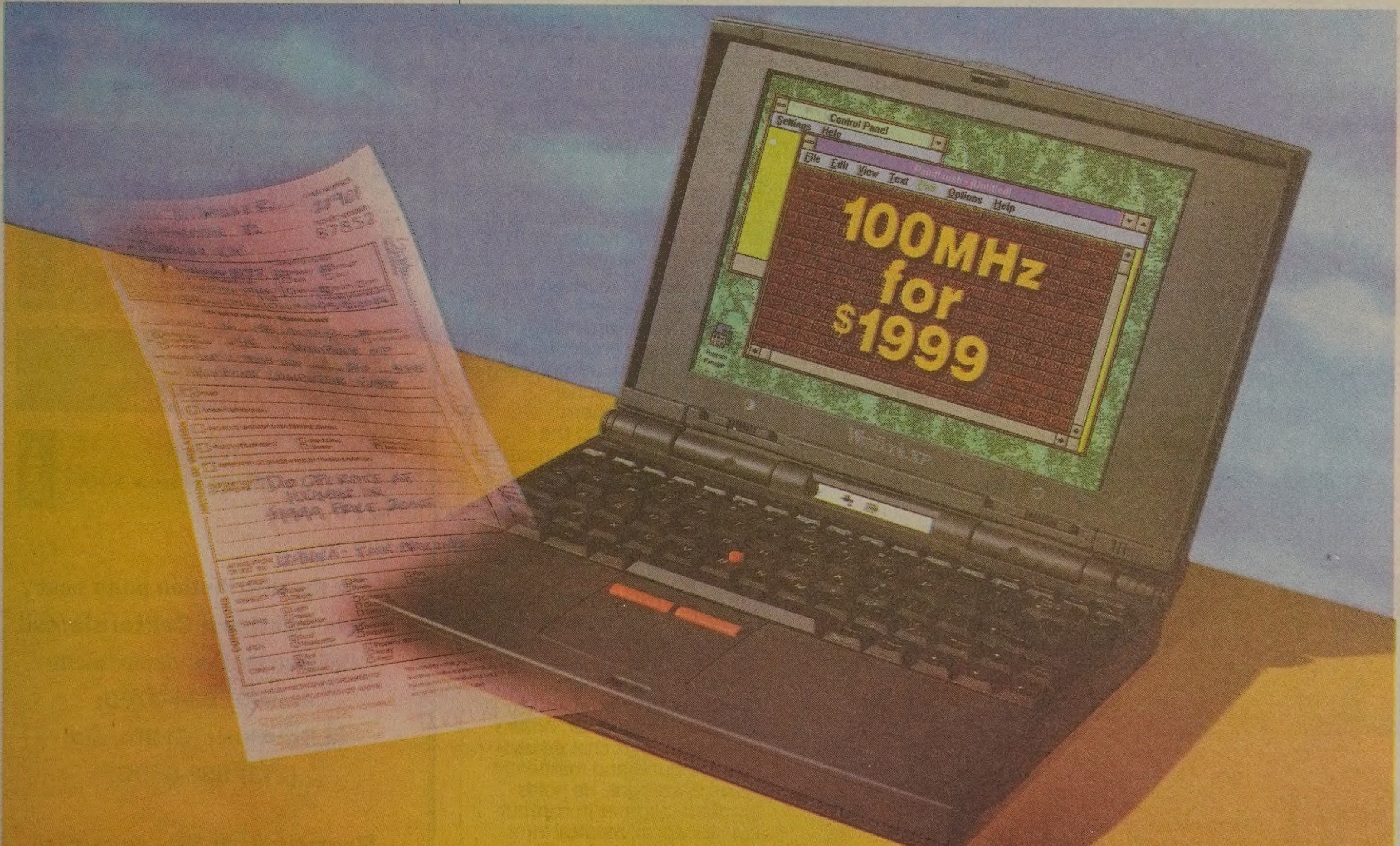
PC Laptop
Most Improved Portable January 1995, WinBook XP

APRIL 1995 BYTE BEST VALUE 486DX4 NOTEBOOK
April 1995, WinBook XP Best Value 486DX4 Notebook

PC WORLD BEST BUY
February-May 1995, WinBook XP DX2/50 8/255 Monochrome

PC WORLD BEST BUY
February-April 1995, WinBook XP DX4/75 8/125 Dual-scan color

PC WORLD BEST BUY
May 1995, WinBook XP SX33 8/260 Monochrome



intel inside
We use only genuine Intel microprocessors in our quality computer systems.

WESTERN DIGITAL ROCKETCHIP VIDEO GRAPHICS ACCELERATION

WinBook®
COMPUTER CORPORATION
a subsidiary of Micro Electronics, Inc.

Call us today, toll-free
1-800-293-1642
Monday-Friday, 8am-9pm EST • Saturday, 9am-4pm
Use your VISA, Discover Card, MasterCard, personal check or P.O. with credit approval. U.S. sales only. 30-day unconditional money-back guarantee from date of purchase.

©1995 WinBook Computer Corporation. All rights reserved. WinBook is a registered trademark of Micro Electronics, Inc. The Intel Inside logo is a trademark of the Intel Corporation. All other trademarks and registered trademarks are property of their respective corporations. All prices and specifications are subject to change without notice or obligation. Prices do not include shipping.

Contributors
MICROTIMES™

Lenny Bailes *(jroe@well.sf.ca.us)* teaches, writes, and consults about computer-related subjects and lives in San Francisco.

Smoot Carl-Mitchell *(smoot@tic.com)* is the managing partner of TIC (Texas Internet Consulting) and president of MIDS (Matrix Information Directory Services).

John C. Dvorak is a prolific author on many computer-related subjects and a connoisseur of appropriate technology.

Bill Gram-Reefer, based in Concord, CA, is president of WORLDVIEW, specializing in connectivity and communications. He has been writing about Macintosh computers since 1984.

Jonathan E. has worked with desktop multimedia since 1988. His USPS mailing address is c/o SoundSwell, 54 29th St., Richmond, CA 94804. His email address is *jeve@well.sf.ca.us* .

Peter John Harrison is a San Mateo-based data communications and connectivity specialist who has worked for a variety of companies, including Xerox PARC and Pacific Bell. Peter enjoys writing about computers and communications issues, and is the author of *The Internet Direct Connect Kit* from IDG Books (ISBN 1-56884-135-3), a step-by-step guide that shows readers how to setup an IBM PC as a node on the Internet. If you'd like to learn more about Peter, you can read his home page on the World Wide Web, *http://www.well.com/www/peterh/pjh-home.http*, or contact him by email at peterh@well.sf.ca.us.

Paul Hoffman is an independent consultant who's been writing about computers for over fifteen years.

Ed Kahn *(edkahn@well.com)* is a writer and consultant based in Pinole.

Bennett Falk *(bkf@netcom.com)*, author of *The Internet Roadmap* and stalwart drummer of the band RTFM, works at Sybase in Emeryville.

Woody Liswood *(woody@well.sf.ca.us)* is a Colorado-based writer and consultant.

David Morgenstern works at *MacWEEK* and volunteers at BMUG.

Pamela Mason *(PMason@aol.com)* is a graphic designer and technical writer who is currently creating multimedia and animation applications for the medical field.

John S. Quarterman *(jsq@tic.com)* is the senior technical partner of TIC (Texas Internet Consulting) and editor of *Matrix News*. He is a long-time observer, consultant, and writer on the matrix of electronic networks.

Robert Moskowitz *(RMoskowitz@aol.com)* is a consultant based in Woodland Hills.

Mitsu Hadeishi *(mitsu@openmind.com)* is the owner of Open Mind Systems in Ashland, OR.

Douglas J. Nakakihara *(DNakakihara@BIX.com)* works as a CPA and has fun with Amigas.

Tony Reveaux, a San Francisco-based consultant, writes the "MediaScan" column in *Film/TapeWorld*, and is the West Coast correspondent for *Computer Video*. He can be reached via MCIMail at 290-3008.

Birrell Walsh *(birrell@well.sf.ca.us)* is a contributing editor for *MicroTimes* and a freelance writer for *BYTE* and other magazines.

Jim Warren has received the Hugh M. Hefner First Amendment Award (1994), the James Madison Freedom-of-Information Award from the Society of Professional Journalists—Northern California (1994), and the Electronic Frontier Foundation Pioneer Award (1992, its first year). He led the successful 1993 effort to make state legislation and statutes available via the public nets without state fees.

He organized and chaired the landmark First Conference on Computers, Freedom & Privacy (1991), founded *InfoWorld*, was founding host of PBS's *Computer Chronicles* and founding editor of *Dr. Dobb's Journal*, and has chaired various computer and mathematics organizations. He holds graduate degrees in computing (Stanford), medical information science (UC Medical Center), and mathematics and statistics. He began working as a programmer in 1968, and was a mathematics teacher and professor for ten years before that. He also serves on Autodesk's board of directors.

MICROTIMES™

Don't get caught at
an empty rack!

Look for MicroTimes on
the following cover dates:

#137	5/29/95	The Global Market
#138	6/26/95	Mobile Computing
#139	7/24/95	Annual Venture Capital Issue
#140	8/21/95	Intellectual Property
#141	9/18/95	Multimedia
#142	10/16/95	Business On the Internet
#143	11/13/95	Silicon Valley Meets Hollywood
#144	11/27/95	Fun & Games: The 3rd Annual Holiday Gift Guide
#145	12/11/95	Annual California Dealers Guide
#146	1/1/96	The MicroTimes 100

For the distribution point near you in **Northern California**, call the distribution department at **(510) 934-3700;** in **Southern California, (213) 851-8600.**

Remember to recycle!

PC Magazine's Editor's Choice Awards, "A quantum leap in accessing the Internet."

Windows Magazine Recommended Product,"...gets top marks all around."

PC Computing, "..search and download files with the click of a button..."

INTERNET MADE EASY

If you're looking to get your hands on the Internet **hooked™** has the other services beat hands down. With its award winning **Pipeline for Windows™ interface**, a click of the mouse lets you handle the entire Internet including e-mail, WAIS, WWW, Gopher, Veronica and more. You don't have to be a Unix guru, touch a device driver or know any TCP/IP to master the Net! Browse, talk, discuss, research, view and download effortlessly. Use e-mail, download software programs, get sports scores and up-to-the-minute news, read on-line books, see what the Hubble telescope sees and much more! **Try hooked absolutely FREE for10 days** and see how easy it is to have the world at your fingertips. Get hooked today!

415-343-1233

10 Day Free Trial Offer
Then as low as
$15.00 per month
with no sign up fee!

Easy Internet Access
hook.d

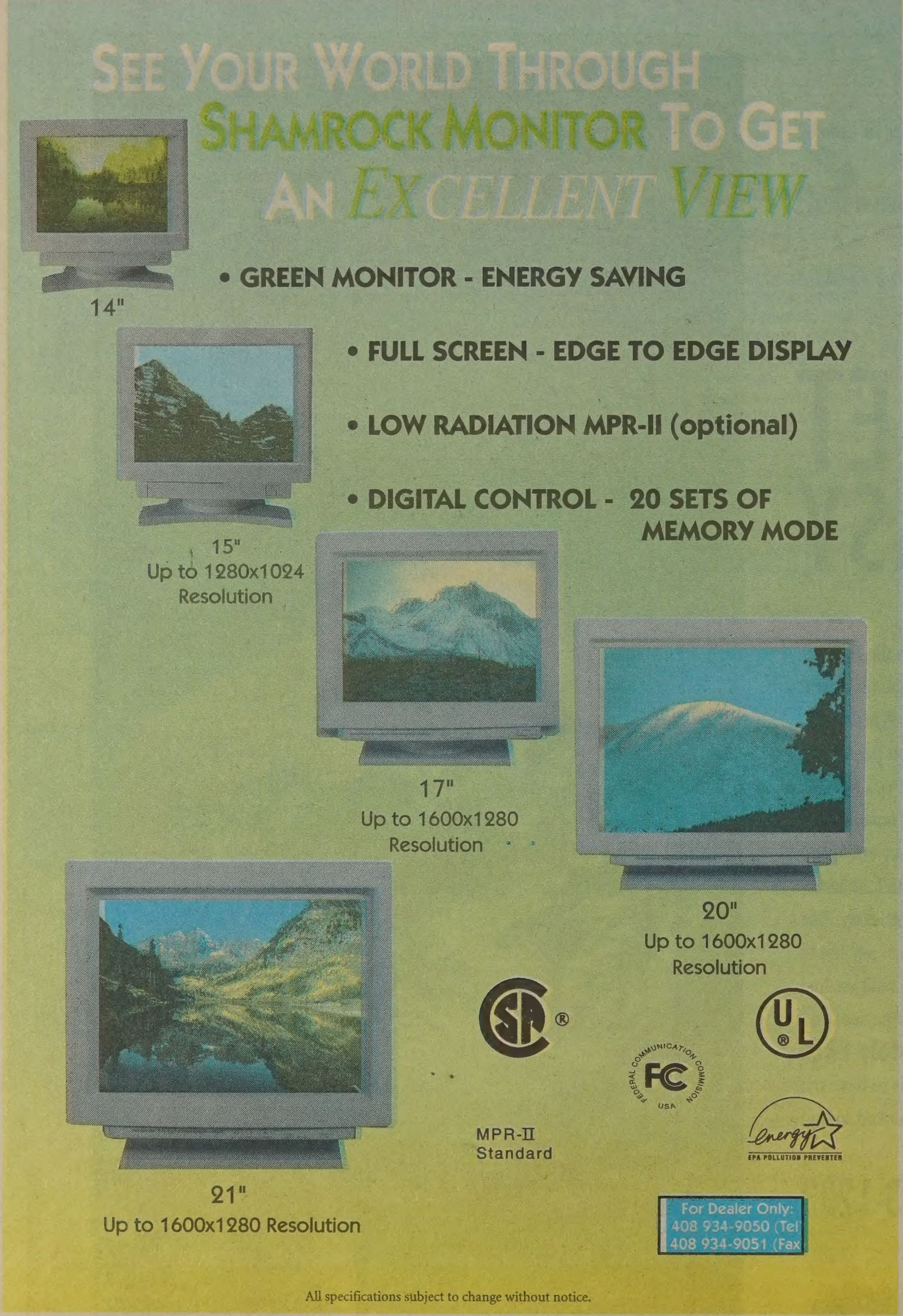
tel: 1-415-343-1233
fax: 1-415-343-1227
domain:hooked.net
staff @ hooked.net

WINDOWS MAGAZINE 1994 RECOMMENDED

PC MAGAZINE EDITORS' CHOICE

PC MAGAZINE EDITORS' CHOICE

hooked provides 415, 408, and 510 area code local access. The hooked logo is a trademark of hooked, Inc. Registered in the U.S.A. Pipeline for Windows is a trademark of the Pipeline Network, Inc. All rights reserved. Other brand or product names are trademarks or registered trademarks of their respective companies. © 1994 The Pipeline Network, Inc. © 1994 hooked Inc.


SEE YOUR WORLD THROUGH SHAMROCK MONITOR TO GET AN EXCELLENT VIEW

- GREEN MONITOR - ENERGY SAVING
- FULL SCREEN - EDGE TO EDGE DISPLAY
- LOW RADIATION MPR-II (optional)
- DIGITAL CONTROL - 20 SETS OF MEMORY MODE

14"

15"
Up to 1280x1024
Resolution

17"
Up to 1600x1280
Resolution

20"
Up to 1600x1280
Resolution

21"
Up to 1600x1280 Resolution

MPR-II
Standard

For Dealer Only:
408 934-9050 (Tel
408 934-9051 (Fax

All specifications subject to change without notice.

DISCOVER THE CUPERTINO COMPUTERS DIFFERENCE!

LARRY WOOD – OWNER

386DX-40 C128..................$375
486DX2-50 C256 VLB 449
486DX2-66 C256 VLB 499
486DX2-80 C256 VLB 519
486DX4-100 C256 VLB 539
PENTIUM-90 C256 PCI 1029
PENTIUM-100 C256 PCI......1229

1 YEAR PARTS, 3 YEAR LABOR WARRANTY ON ALL SYSTEMS
MON-FRI 10:00-6:00
SATURDAY 11:00-4:00

SALE PRICES FOR CASH CUSTOMERS NO CREDIT CARDS

Corporate P/O's Welcome

Prices & availability subject to change w/o notice

STANDARD SYSTEM: Motherboard & CPU, 4MB RAM, Desktop or Mini Tower Case, 230 Watt Power Supply, 101 Key Enhanced Keyboard, 2 Hard/2 Floppy Disk 1:1 Controller Card, AMI Bios, 1.2 or 1.44 MB Floppy Drive, 2 Serial/Parallel/Game I/O Ports.

CUPERTINO COMPUTERS INC.

10675 S. DE ANZA BLVD.,
TEL: (408) 255-5997

CUPERTINO, CA 95014
FAX: (408) 255-7699

BAM MEDIA
BAM ACCESS TO MARKETS

California's Computer Magazine
MICROTIMES™

EDITOR-IN-CHIEF
Dennis Erokan

PUBLISHER
Chuck Stanley

EDITORIAL 510-934-3700
email: Microx@well.sf.ca.us
EDITOR Mary Eisenhart
ASSOCIATE EDITOR Michael Robin
NEWS EDITOR Paul Hoffman
ART DIRECTOR Monika Lukenbill
EDITORIAL DESIGNER Rick Colby
CONTRIBUTING EDITORS Lenny Bailes, John Perry Barlow, Smoot Carl-Mitchell, Jennifer Robin Cherniss, John C. Dvorak, Jonathan E., Bennett Falk, Mitsu Hadeishi, Peter John Harrison, Ed Kahn, Matthew Leeds, David Morgenstern, Robert Moskowitz, Douglas J. Nakakihara, Fabian Pascal, John S. Quarterman, Tony Reveaux, David A. Simon, CPA, Birrell Walsh, Jim Warren, John Wolcott
CONTRIBUTING WRITERS Mikael Blaisdell, Anna Couey, John Cowan, Rich Grace, Fred Haslam, Fred Lieberman, Woody Liswood, Judy Malloy, Pamela Mason, Kevin Savetz
EDITORIAL ASSISTANT John Downen
CONTRIBUTING PHOTOGRAPHERS Michael Jay, Anne Knudsen, Susana Millman, Paul Winternitz

ADVERTISING 510-934-3700
BUSINESS MANAGER Amy Marson
SENIOR ACCOUNT DIRECTOR (NO. CAL.) Barry Green
ACCOUNT EXECUTIVES Marty Gillow, Tracy Longo, Ken Marson, Herb Mendelsohn, Debra Siegel, Chloe Vezo
MARKETING MANAGER Carolyn Guerrero
CLASSIFIED & SUBSCRIPTION MANAGER (NO. CAL.) Jennifer Kosta
ADVERTISING SERVICES ASSISTANT
Chad Schmidt (Northern California)
Michelle Rosendin (Southern California)

PRODUCTION
DIRECTOR OF PRODUCTION Amy Marson
GROUP PRODUCTION MANAGER Mary Beth DeSantis
GRAPHIC ARTS MANAGER Gary Sparks
AD COORDINATORS Matt Matuska, Beth Bartels Tarder
PRODUCTION ASSISTANT Richard Cook
GRAPHIC ARTS STAFF Randy Atwood, Jennifer Bagwell, Linda Burkard, London Cammack, Eleanor Carag, Paul Dorian, Peter Kowalesyn, Miranda Liss, Tracy McCormack, Michelle Roberts, Lisa Spencer
PROOFREADER Becky Forsyth

ADMINISTRATION
HUMAN RESOURCES DIRECTOR Erica Stein-Oakley
N.C. OFFICE MANAGER Lori Sutherland
N.C. ADMINISTRATIVE ASSISTANTS Leta Jesch, Kerri Neely
L. A. ADMINISTRATIVE ASSISTANT Jacqui Tavis

ACCOUNTING/COMPUTER SERVICES
CONTROLLER Linda May
ACCOUNTING Joaquin Arellano, Vickie Liu, Brian Murray, Bonnie Peterson, Sara Tassione
CREDIT MANAGER Doug Morgan
NETWORK/COMPUTER SUPPORT Jason Boatman, John Dito

DISTRIBUTION 510-934-3700
DISTRIBUTION MANAGER John Erokan
ASSISTANT MANAGER/LA Art Holland
DISTRIBUTION ASSISTANTS Kenny Priest
DISTRIBUTION CLERKS Laney Erokan, Jesse Sullivan
FIELD COORDINATORS Roe Eyth, Frank Grygus
DISTRIBUTION Dennis Anderson, John Clefstad, Mike Jett, Don Karr, Juan Lau, Jac Michanovic, Robbie Myers, Reliable Circulation, John Dimas Rezendes, Bill Rivera, SPS, Wilfredo Villarroel
PUBLICATIONS *BAM*

40
BPA INTERNATIONAL

FOUNDERS
Dennis Erokan, Don Hamilton, Pat Hamilton

This Vol. 11 No. 5 May 1, 1995, Whole No. 136. MicroTimes, California's Computer Magazine, is published by BAM Media, Inc., 3470 Buskirk Ave., Pleasant Hill, CA 94523. Phone Advertising Office (510)934-3700. Fax (510)934-7351. email Microx@well.sf.ca.us Los Angeles Office, 6767 Forest Lawn Drive, Suite 110, Los Angeles, CA 90068. Phone (213) 851-8600. Fax (213)851-8303. San Jose Office, 36 Harold Ave., Suite 2, San Jose, CA 95117. Phone (408) 244-4400. Fax (408) 248-4552. Anaheim Office, 801 East Katella Ave., Suite #210, Anaheim, CA 92805. Phone (714) 939-2809. Fax (714)978-6135. MicroTimes™ is © 1995 by BAM Media, Inc. Subscription rates: 14 issues, U.S.: 4th Class $35 (Allow 3 to 4 weeks for delivery), 1st Class $65 (Allow 1 to 2 weeks for delivery). MEXICO & CANADA: Surface Mail $50 (Allow 4 weeks for delivery). Air Mail $75 (Allow 1 week for delivery). OVERSEAS: Surface Mail $50 (Allow 6-10 weeks for delivery). Air Mail $178 (Allow 1 week for delivery). To receive sample issues, please send $5 ($6 for overseas) to cover postage costs. Back issues are $6 each. All rights reserved. Reproduction in whole or in part without permission of Publisher is strictly prohibited. The staff and management of MicroTimes do not advocate or encourage the use of any product or service advertised herein for illegal purposes.

PC REPAIR & UPGRADES WELCOME

SONY. IBM. adaptec CREATIVE CREATIVE LABS, INC. ORCHID DIAMOND 3Com AI TECHNOLOGIES INC

MONTHLY SPECIALS

15" Non-Interlaced .28dpi (1280)	$285
Intel P-75/256K/PCI/IDE I/O	285
IBM 486SLC2-66/64K/CPU/Math Co	135
486DX2/66 3 VLB/CPU	149
Intel P-90/256K/IDE/CPU	820
Sony CD-ROM Double Speed	109
Teac CD ROM 4X	175
Mini Tower w/230W PS	34
Mid Tower w/230W PS UL	65
Full Tower w/250W PS/2 Fans	75
101 Russian Keyboard	25
Mitsumi Enhanced Keyboard	13
1x3-70 SIMM	36
28.8 Fax/Modem Int	95
Sound Blaster Pro 16 Bit MCD	75
Enhanced IDE I/O VLB	17
SVGA Card 1 MB VLB/2FDD/2HDD/IO	**79**
Adaptec 1940 SCSI Card	215
Logitech Mouseman	29
270 MB IDE Hard Drive	149
540 MB IDE Hard Drive	175
1 GB IDE Hard Drive	325
16 Bit Ethernet/Novell/Coax	25
230W Power Supply	28

Multimedia Notebooks!

ONLY $1860

- **Intel 486DX2-66 CPU/128K Cache**
- **4 MB RAM Expandable to 36 MB**
- **340 MB Hard Drive Upgradable to 810MB**
- **1.44 MB Floppy Drive**
- **10.3" Dual Scan Color Display**
- **MS-DOS & Microsoft Windows Installed**
- **Removable Battery 2 Hour Fast Charge**
- **Built-In Trackball**
- **Weight 6.6 Lbs**
- **Advanced Power Management**
- **Built-In Speakers & Microphone**
- **Sound Blaster Compatible**
- **2 Type II & 1 Type III PCMCIA Slots**

CPU TYPE	HD	MONO	DUAL SCAN	ACTIVE MATRIX
486DX100	340MB	$1530	$1950	$2650
486DX2-66	340MB	$1430	$1850	$2550

486-66 Multimedia Bundle

Package Includes

- IBM 486-66 64K/2 VLB/CPU
- Sony CD ROM Double Speed
- 420 MB Hard Drive
- Sound Card 16 Bit Media Magic
- 1.44 MB Floppy Drive
- Mini Tower Case w/230W Power
- 14" SVGA 1024x768 Color Monitor
- 4 MB RAM-70ns SIMMS
- SVGA Card 16 Bit 1MB VLB
- 12 CD Titles FREE
- 3 Button Mouse & Pad FREE
- IDE Controller VLB 2FDD, 2HDD, 2S/1P/1G
- 101 Enhanced Keyboard
- Microphone Speaker

$965

HOT NEW CD TITLES

'95 Encarta (sale with system)	$29
'95 Grolier Encyclopedia 7.02	14
101 Best Games #2	7
101 Best Games #1	7
25 Best Games	7
Arthur's Teacher Trouble	11
Casino Game	9
Speakers referance	9
FotoPro Landscape I	9
Fotopro Waterscene I	9
Fotopro Close Ups I	9
The Adventure CD	9
Space Shuttle	9
Compton's Interactive 95	17
CD Deluxe (Includes Mavis Beacon)	13
CD Kids Game Collection	7
Chess Words	14
Chessmaster /Life 8	11
Dark Sun Wake Ravanger	14
Dark Sun Shattered	14
I Can't Stop My Love	10
Complete Guide to Prescriptions	14
Pretty Women I	7
Lace & Lingerie	7
Swimsuits	7
Speakers Encyclopedia	7
Family Doctor 3rd Edition	14
Fleet Defender F-14 Simulation	17
Just Grandma & Me	11
Mario Is Missing CD Deluxe	14
Mega Race	9
Great Naval Battles	9
Wolfenstein 3D Mania	9
Cyclone	13
Interactive Storytime II	9
Interactive Storytime III	9
Dragon	16
Childrens Story & Color Book	11
Dr Mathematic Lab	11
Real World Math	11
Somebody Catch My Homework	11
Mens Club	7
Pretty Baby	7
Pink Lady	7
La Traviata	7
Sakura III	7
Fascination	9
Garden Secret	9
Temptation	9
Sweet Body	9
Hurt Angel	9
Reveal Secrets	9
Oceans Below	11
US Atlas	9
World Atlas v4.0	9
She	9
Woman	9
Passion	10

WIN WIN PACK 1
(12 TITLES ON 3 CD'S) $29
Grolier Multimedia Encyclopedia, The Animals, The Robot Tank, Checkers, Backgammon, The Puzzle Gallery, Dian Lou, Beyond The Black Hole, Loopz, Cribbage King, Life & Death, The Chess Master 2100

EUREKA PACK
(14 TITLES ON 3 CD'S) $35
Compton Interactive Encyclopedia, Contraption Zack, D/Generation, Epic, F29 Retaliator, Life & Death II-The Brain, Mavis Beacon Teaches Typing, Might & Magic II, Push Over Robocop 3D, The Chess Master 2100, The Chess Master 3000, US Atlas, World Atlas

EDUTAINMENT PACK
(10 TITLES) $29
25 Best Games, Animal Kingdom, Digital Cinema, Discoveries of the Deep, New Kids, Edutainment #1, Swimsuits, Terminator 2, Chess Wars, The Star Child, Tropical Rainforest, Ultimate Domain

'95 WINDOW PACK
(6 TITLES on 3 CD'S) $29
Chessmaster 4000, Groliers Multimedia Ency, Mavis Beacon Teaches Typing, The Animals, US Atlas, World Atlas

MULTIMEDIA PACKS

2X CD-ROM IDE SONY $210
Media Magic 1SP 16 Bit Sound Card
A Pair Of Speakers
Microphone
12 CD Titles Edutainment Pack

4X CD-ROM SCSI NEC $495
16 Bit Sound Blaster SCSI
A Pair Of Speakers
Microphone
12 CD Titles Edutainment Pack

4X CD ROM IDE TEAC $275
16 Bit Sound Card Media Magic
A Pair Of Speakers
Microphone
12 CD Titles WIN WIN Pack

SPEAKERS & MICROPHONE

120W/Pair	**$55**
80W/Pair	**$44**
70W/Pair	**$35**
40W/Pair	**$25**
4W/Pair	**$8.00**
Microphone	**$8.00**

PENTIUM PCI

- Intel Pentium 90 CPU
- P90 MHz Motherboard
- 256K Cache
- 8 MB 72 Pin RAM 70ns
- SVGA Card 1MB PCI
- 1.44 MB Floppy Drives
- IDE Controller w I/O
- 540 MB IDE Hard Drive
- Keytronic 101 Key Keyboard
- Medium Tower Case
- 250 Watt Power Supply

$1359

Pentium-60 MHz VLB	**$1055**
Pentium-66 MHz VLB	**$980**
Pentium-75 MHz	**$1190**
Pentium-100 MHz	**$1550**

486 PCI SYSTEM

- 486DX2-66 CPU w/Fan
- 486DX2-66 Motherboard/Zif/256K
- 8 MB RAM 70ns
- IDE Controller 2S/1P/1G
- 1.44 MB Floppy Drives
- 420 MB IDE Hard Drive
- Mitsumi 101 Key Keyboard
- SVGA Card 1 MB
- Medium Tower Case/LED
- 230 Watt Power Supply

$855

486DX2-50 MHz	**$890**
486DX2-80 MHz	**$895**
486DX4-100 MHz	**$985**

486-100 SYSTEM

- 486DX4-100, 3 VLB Motherboard
- 80486DX4-100 CPU w/Fan
- 256K Cache
- 1.44 MB Floppy Drives
- 32 Bit VLB IDE I/O
- 540 MB IDE Hard Drive
- 4 MB Exp to 64 MB
- Mitsumi 101 Key Keyboard
- SVGA Card/ 1MB VLB
- Mini Tower Case
- 230W Power Supply

$725

486DX2-66 MHz	**$660**
486DX2-80 MHz	**$710**
486SX-33 MHz	**$656**

IBM 486-66/64K

- IBM 486SLC w/Math Co
- 2 VESA Local Bus Board
- AMI BIOS 64K Cache to 128K
- 4 MB RAM 70ns
- 1.44 MB Floppy Drives
- IDE Controller 2FD/2HD Controller
- 420 MB IDE Hard Drive
- AT I/O 2S/1P/1G
- Enhanced 101 Key Keyboard
- SVGA Card
- Mini Tower Case
- 230W Power Supply

$539

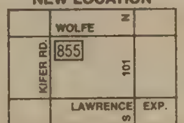
IBM 486BL-75MHz/Math Co	**$620**

KINGSTAR COMPUTERS, INC.

MON - FRI: 8:30-6:00
Email: rlsz28@aol.com

SUNNYVALE
855 KIFER RD. #B · SUNNYVALE, CA 94086
Tel: (408) 736-8590 · Fax: (408) 736-4151

NEW LOCATION



1 Year Parts &
Lifetime Labor Warranty
on Systems.

Prices and Company Policy Subject To Change W/O Notice. Not Responsible for Typographic Errors. Prices Reflect Cash Price Only.

News and Views

BY PAUL HOFFMAN

Industry Insights

Making Sense Of Microsoft

It's never any fun writing about the same subject two months in a row. However, the Microsoft stories have taken on a life of their own. Not as much of an unreal life as, say, the O.J. Simpson trial, but a life nonetheless. Last month's news stories (about a federal judge overturning the consent decree between Microsoft and the Department of Justice, and Microsoft being sued by Apple) caused such a flurry of media coverage that Microsoft is now a story unto itself.

Maybe that's a good thing. In any industry, it's impossible to tell when a company goes from being "significant" to "huge" to "you must reckon with them all the time." Every company is usually trying to create the impression that they're in a higher category than they really are, at least until they get close to the "could be a monopoly" category. At that point (which is impossible to really see), smart companies start saying, "Oh, there's plenty of competition in this market. We're competing as hard as we can."

Microsoft is one such smart company. Bill Gates, son of a famous lawyer who was recently the president of the Washington state bar association, has always known that if his company grew too big, the rules would shift, and the public perception could shift with it. He's been downplaying Microsoft's role in the computer industry for years, knowing that the company's growth and market share would bring it to the enviable but tough position it is in today: a monopoly of sorts.

The New IBM

Microsoft moved from being a huge player to being in a monopoly position about a year or two ago. That's when the computer industry realized a few things:

- MS-DOS and Windows weren't the best operating systems for the Intel platform, but everyone wanted them anyway.
- Microsoft's major application software was about as good as its competition's, but its marketing and name recognition was giving it a huge advantage.
- Bill Gates loved to compete hard, and had no compunction towards helping competitors for the greater good of the computer industry.

There is no precise legal definition of a monopoly, but a good working definition for the rest of us is: a company that owns so much of a particular market that competitors cannot take any significant market share away from the market leader. This definition applies to Microsoft only with respect to microcomputer operating systems; in all other of its major markets, Microsoft has plenty of real competition.

In this way, Microsoft resembles IBM of fifteen years ago. At that point, IBM essentially owned the mainframe and networking markets, which were the largest and most important parts of the entire computer market. Anyone around the business at the time remembers that there were certainly competitors in some markets, such as DEC in the minicomputer market. But these competitors could not grow their market share regardless of the quality and price of their products relative to IBM's.

IBM's monopoly was not enforced by any regulatory law. There were no legal barriers to IBM's competitors, and many of them used every method they knew to gain market share. A few of them did quite well in niche markets; many others failed or just never went anywhere. About a decade ago, IBM lost its momentum, lost market share in important segments, and has now reverted back to simply being "huge."

Where Microsoft and the old IBM are comparable is in marketing. Fifteen years ago, almost no one would dream of making a purchase without thinking about what IBM had to offer or how IBM might turn the market the next year. IBM's mindshare of purchasers bordered on the amazing. Today, Microsoft has a similar amount of mindshare in many parts of the microcomputer market. Few people consider buying PC operating systems by anyone other than Microsoft; some (but still a small number) would consider buying a Windows word processor, spreadsheet, database, or presentation package without looking at Microsoft's products.

Where Microsoft and the old IBM differ is on interoperability. Microsoft won't let anyone else say what the programming interface for MS-

continued on page 16

SAVE 1-2-3 InfoGOLD

InfoGOLD
MULTI-MEDIA
Sound
BLASTER

PC MAGAZINE EDITORS' CHOICE

BYTE A McGRAW-HILL PUBLICATION

Windows SOURCES

Exceptional good reviews as awarded from major magazines

BEST BUY USA

GOLD

WINDOWS MAGAZINE RECOMMENDED

WINDOWS MAGAZINE

BEST EDITOR'S CHOICE

"*InfoGOLD* is a combination of Gibraltar-like construction, quality components, expandability, serviceability and respectable performance."

● **90Mhz Pentium® processor & PCI**

$ 2,595

FEATURES: # 6100

- 256K CACHE
- 16MB RAM
- 540MB IDE HARD DISK DRIVE
- 1.44MB TEAC FLOPPY DRIVE
- PCI DIAMOND STEALTH 64 S-VGACARD W/2MB
- PCI IDE CONTROLLER CARD
- 2 SERIAL, PARALLEL PORTS
- 101 ALPS ENHANCED KEYBOARD
- SONY 15SF, 15" FLAT SCREEN MONITOR
- SONY DOUBLE SPEED CD-ROM DRIVE
- FULL SIZE TRIPLE COOLING FAN TOWER CASE WITH SWING OUT SIDE DOORS
- CPU HEATSINK WITH BUILT IN COOLING FAN
- MICROSOFT COMPATIBLE MOUSE

THE EXPERTS CHOICE

● Pentium® 100MHZ PCI	$ 1,995
● Pentium® 90 MHZ PCI	$ 1,795
● Pentium® 60 MHZ VLB	$ 1,485
● 486 DX4 100 MHZ VLB	$ 1,295
● 486 DX2 80 MHZ VLB	$ 1,235
● 486 DX2 66 MHZ VLB	$ 1,195

FEATURES: # 3150

- 256K CACHE
- 8MB RAM
- 420MB IDE HARD DRIVE
- 1.44MB TEAC FLOPPY DRIVE
- LOCAL BUS WINDOWS ACCEL. S-VGA CARD W/1MB
- LOCAL BUS CONTROLLER CARD
- 2 SERIAL, PARALLEL, GAME PORTS
- 101 ALPS ENHANCED KEYBOARD
- 14" INFOGOLD3000 NON-INTERLACED MONITOR 0.28DPI - HITACHI TUBE
- CUSTOM MID-SIZE TOWER CASE
- CPU COOLING FAN
- MICROSOFT COMPATIBLE MOUSE

MULTI-MEDIA SYSTEM

● 486DX4-100MHZ	$ 1,345
● 486DX2-80 MHZ	$ 1,275
● 486DX2-66 MHZ	$ 1,245

FEATURES: # 3700

- 128K CACHE
- 4MB RAM
- 420MB IDE HARD DRIVE
- 1.44MB TEAC FLOPPY DRIVE
- VESA LOCAL BUS S-VGA CARD W/1MB
- VESA LOCAL BUS CONTROLLER CARD
- 2 SERIAL, PARALLEL, GAME PORTS
- SONY DOUBLE SP. CD-ROM
- SOUND BLASTER 16-BIT SOUND CARD
- STEREO SPEAKERS
- MULTI-MEDIA CD-PACKAGE, INCL: MULTI-MEDIA ENCYCLOPEDIA, WORLD ATLAS, US ATLAS, MAVIS BEACON TEACHES TYPING, CHESS MASTER 4000, THE ANIMALS
- 101 ALPS ENHANCED KEYBOARD
- 14" INFOGOLD2000 MONITOR 0.28DPI - HITACHI PICTURE TUBE
- CUSTOM MINI TOWER CASE
- CPU COOLING FAN
- MICROSOFT COMPATIBLE MOUSE

* Pentium® *is a trademark of Intel Corporation.*

Terms and Conditions : AMS accepts VISA, MC, Money Orders, Cashier Checks, P/O's, Wire Transfers. One Year Warranty on Parts & Labor. 30 Day Satisfaction Guaranteed. All returns are subject to approval. 15% restocking fee. All prices subject to change without notice. Not responsible for typos.

Serving Corporate Customers since1986 such as: United Nations, 3COM, U.S. Government, Weitek, General Motors, Ohio State University, Chevron, Siemens, and more......

American Multisystems
538 Oakmead Parkway,
Sunnyvale, CA94086, USA

TEL : 408.524.9091
FAX : 408.524.9099

For more information and your *FREE* coupon,
call 24 hours *InfoFAX* : 408. 524. 9098
Request document # 8000
for your free coupon.
E Mail:
InfoGOLD2@ aol.com

Prestige Computer Inc.

408-249-3398 • Fax: 408-249-3392

3248 Stevens Creek Blvd., San Jose, CA 95117

1-800-888-6210

MICROSOFT® WINDOWS™ COMPATIBLE

intel inside

Pick Up a System Today!
Don't Pay until
August
[illegible]

PRESTIGE
COMPUTER
PRESTIGE COMPUTER

Prestige Graphics Design System

- Pentium P-90 MHz/256K Cache PCI Bus
- Intel P90 MHz Processor
- 8 MB of RAM - 70 ns
- 1.44 MB TEAC Floppy Drive
- 850 MB IDE Hard Drive
- PCI IDE H/F Controller
- 2 Serial, 1 Parallel, 1 Game Port
- Cirrus PCI Graphics Card with 1 MB
- 15" 1280X1024 .28 dot Non-Interlaced SVGA Monitor
- 101 Key Enhanced Keyboard
- Mid Tower Case with 230 W. Power Supply
- Mouse/MS DOS/Windows

BEST BUY

$1869.00

Prestige Energy Saver System

- AIR 486DX2-66MHz/256K Cache VLB Bus
- Intel 486DX2-66Mhz Processor
- 4 MB of RAM - 70 ns
- 1.44 MB TEAC Floppy Drive
- 420 MB IDE Hard Drive
- VLB IDE H/F Controller
- 2 Serial, 1 Parallel, 1 Game Port
- Cirrus VLB Graphics Card with 1 MB
- 14" 1024x768 .28 dot Non-Interlaced SVGA Monitor
- 101 Key Enhanced Keyboard
- Deluxe Mini Tower Case with 230 W. Power Supply
- Mouse

$999.00

Prestige Office Workstation

- Pentium P-90 MHz/256K Cache PCI Bus
- 8 MB of RAM - 70 ns
- 1.44 MB TEAC Floppy Drive
- 540 MB IDE Hard Drive
- PCI IDE H/F Controller
- 2 Serial, 1 Parallel, 1 Game Port
- Stealth 64 PCI SVGA card w/1MB
- 15" 1280X1024 .28 dot Non-Interlaced SVGA Monitor
- 101 Key Enhanced Keyboard
- Mid Tower Case with 230 W. Power Supply
- Mouse/MS DOS/Windows

Novell Certified NetWare Engineer

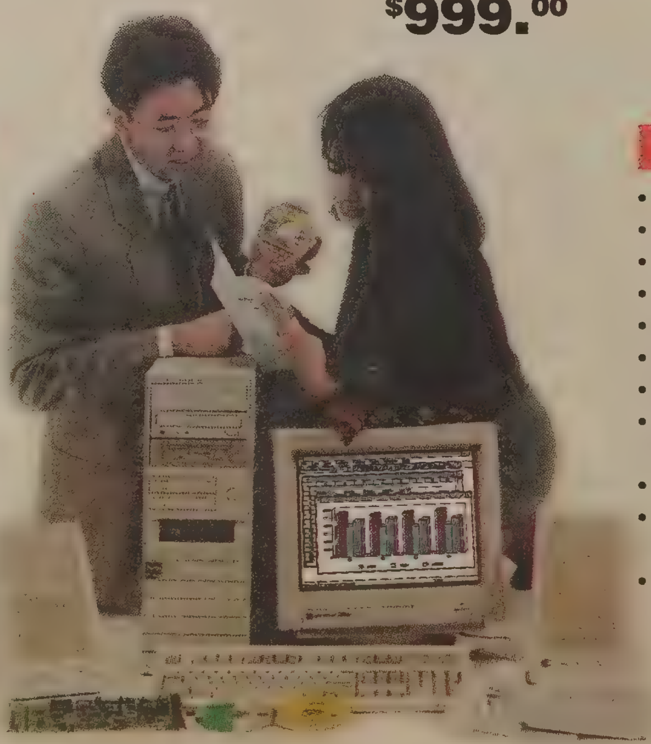
$1829.00

Prestige Engineer's System

- Pentium P-90 MHz/256K Cache PCI Bus
- 16 MB of RAM - 70 ns
- 1.44 MB TEAC Floppy Drive
- 1.08 GB SCSI Hard Drive
- Adaptec PCI SCSI Controller
- 2 Serial, 1 Parallel, 1 Game Port
- Stealth 64 PCI SVGA card w/1MB
- 15" 1280X1024 .28 dot Non-Interlaced SVGA Monitor
- 101 Key Enhanced Keyboard
- Mid Tower Case with 230 W. Power Supply
- Mouse/MS DOS/Windows

72 Hours Burn In

$2599.00



Prestige Power Server

- Pentium P-100 MHz/512K Cache PCI
- 16 MB of RAM - 70 ns
- 1.44 MB TEAC Floppy Drive
- 1.2 GB Wide SCSI Hard Drive
- Adaptec PCI Wide SCSI Controller
- 2 Serial, 1 Parallel, 1 Game Port
- PCI SVGA Graphics Card with 1MB
- 14" 1024x768 .28 dot Non-Interlaced SVGA Monitor
- 101 Key Enhanced Keyboard
- Full Tower Case with 250 W Power Supply
- Mouse/MS DOS/Windows

BEST BUY

$2929.00

Prestige Family Multimedia System

- AIR 486DX2-66MHz/256K Cache
- 4 MB of RAM - 70 ns
- 1.44 MB TEAC Floppy Drive
- 540 MB IDE Hard Drive
- VLB IDE H/F Controller
- 2 Serial, 1 Parallel, 1 Game Port
- Cirrus VLB Graphics Card with 1 MB
- 14" 1024x768 .28 dot Non-Interlaced SVGA Monitor
- 101 Key Enhanced Keyboard
- Mid Tower Case with 230 W. Power Supply
- Mouse/MS Dos/Windows
- Sony 2X Speed CD-ROM Drive
- SB-16 Sound Card
- Mini Amp. Speakers
- 15 Multimedia Titles

$1339.00

BEST BUY

PRESTIGE MULTIMEDIA SYSTEM PACKAGE

Prestige Ultra Multimedia System

- AIR 486DX2-66MHz/256K Cache
- 8 MB RAM - 70 ns
- 1.44 MB TEAC Floppy Drive
- 540 MB IDE Hard Drive
- VLB IDE H/F Controller
- 2 Serial, 1 Parallel, 1 Game Port
- Cirrus VLB Graphics Card with 1 MB
- 14" 1024x768 .28 dot Non-Interlaced SVGA Monitor
- 101 Key Enhanced Keyboard
- Mid Tower Case with 230 W Power Supply
- Mouse/MS Dos/Windows
- TEAC 4X Speed CD-ROM Drive
- SB-16 Sound Card
- Mini Amp. Speakers
- 15 Multimedia Titles

$1549.00

Prestige Performance Multimedia System

- SuperMicro Pentium P-90MHz/256K Cache PCI Bus
- 8 MB of RAM - 70 ns
- 1.44 MB TEAC Floppy Drive
- 850 MB IDE Hard Drive
- PCI IDE H/F Controller
- 2 Serial, 1 Parallel, 1 Game Port
- Cirrus PCI Graphics Card with 1 MB
- 15" 1280x1024 .28 dot Non-Interlaced SVGA Monitor
- 101 Key Enhanced Keyboard
- Mid Tower Case with 230 W. Power Supply
- Mouse/MS Dos/Windows
- TEAC 4X Speed CD-ROM Drive
- SB-16 Sound Card
- Mini Amp. Speakers
- 15 Multimedia Titles

$2239.00

Acom Patriot 4000 Multimedia Notebook

- Intel SL Enhanced Processor
- 4 MB RAM Expandable to 32 MB
- 1 MB Flash ROM Programmable BIOS
- Detachable 1.44Mb Floppy Drive
- 340MB Hard Drive (540MB & 730MB Available)
- 32 Bit VLB SVGA 1024x768 with 1 MB Graphics Card
- 9.5" Viewable Screen Size
- Mono, Dual Scan or Active Matrix
- 86 Keys w/Inverted Cursor
- Extra Large 25MM Built-in Trackball
- PCMCIA 2X Type II, 1X Type III Slots
- 1 Serial, 1 Parallel, 1 Ext. SVGA, Docking Station Port
- Built-in Sound Card
- Rechargeable Nimh Battery
- Black Carrying Case
- Auto Switching AC/DC Adapter
- Mono 11.4x8.7x1.77", 5.5 lbs
- Dual Scan 11.4x8.7x1.77", 5.9 lbs
- Active Matrix 11.48x8.7x1.77", 6.1 lbs

MONO

486DX2-50MHz SL	$1389.00
486DX-66MHz SL	$1459.00
486DX4-100 MHz	$1539.00

DUAL SCAN COLOR

486DX2-50MHz SL	$1709.00
486DX2-66MHz SL	$1779.00
486DX4-100MHz	$1859.00

ACTIVE COLOR

486DX2-50MHz SL	$2569.00
486DX2-66MHz SL	$2689.00
486DX4-100MHz	$2839.00

PATRIOT 4000

30Day $BACK Guarantee

72 Hours Burn In

BEST BUY

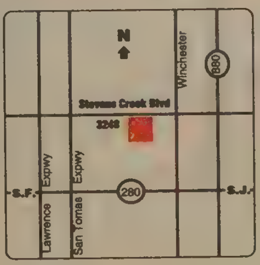
MICROSOFT® WINDOWS™ COMPATIBLE

Ordering Information:

Shipping and handling additional. Corporations rated 32A or better and government accounts are accepted on a 30 net basis, C.O.D. orders over $500 add $10.00 special handling. Returns must have prior authorizations from our Customer Service Department at (408) 249-3398. Returns must be in original packaging and include all warranty cards and manuals. Incomplete product returns, unauthorized returns and refuse shipments are subject to a 20% restocking charge.

Free Financing for 90 Days!

- 100% Financing Available - Low Monthly Payments
- 30 Day "No Questions Asked" Money Back Guarantee
- Free Lifetime Technical Support
- One Year Parts and Two Years Labor Warranty
- Customized Configuration and Leasing
- Corporate & Government P.O.'s Welcome! with Credit Approval



Prestige Computer Inc.

408-249-3398 • Fax: 408-249-3392

3248 Stevens Creek Blvd., San Jose, CA 95117

1-800-888-6210 *(outside of 408 areacode)*

Business Hours: Mon-Sat : 9am-7pm
Saturday : 9:30am-7pm
Sunday Closed

Prices and specifications are subject to charge without notice. All trademarks belong to their respective companies. Not responsible for typographical errors.

Insights *continued from page 12...*

DOS and Windows is, but it is quite open about letting other companies develop all levels of software for them. IBM would make it almost impossible for other hardware vendors to successfully connect with IBM hardware, and grew complacent because of itsenforced market prowess. Microsoft doesn't care that much if other companies create great Windows programs, since Microsoft has enough good programmers to copy the best features of any package in any software segment it wants.

Even if Microsoft uses unfair, monopolistic practices in selling its applications, you don't hear many consumers complaining about it. ■

Microsoft disclaims the monopoly on its operating system. Bill Gates has been taking every opportunity in the last few months to point out that the Federal Trade Commission and the Department of Justice spent years investigating Microsoft, and only decided to push for changes in two areas of the way Microsoft did business. Gates claims that this shows that Microsoft is not a monopoly.

Of course, those two things are completely different. Microsoft's lawyers wore down the federal lawyers, and Gates took advantage of the situation by agreeing to two small areas in exchange for letting the Department of Justice out of what would prove to be at least five years in court. That's how smart monopolies work.

Why People Like Monopolies

It is important to look at who is complaining the loudest about Microsoft's monopoly. It isn't the consumers, who could easily pick one of the many better operating systems on the market. After having to navigate through a zillion decisions about what combination of hardware they want, most consumers appreciate not having to think too hard about what software to put in the system.

Five years ago, the choices were easy: MS-DOS, WordPerfect, and 1-2-3. Anything beyond that was for computer professionals, people who could understand the differences between similar programs and operating systems. Today, the operating system is still a "slam-dunk" choice for most people: Windows. Sure, IBM can sell lots of OS/2 Warp systems, but remember that Apple "sells" more copies of MacOS when it sells hardware than IBM sells copies of OS/2.

Microsoft understood the customers' wish not to have to think about the abstract parts of their computer purchase over a decade ago. By making MS-DOS seem like the choice everyone else was making, not necessarily the best choice, Microsoft bought a huge amount of mindshare. It became one less worrisome thing to think about. As the saying goes, "Freedom of choice is what you've got, but freedom from choice is what you want."

Esther Dyson, the popular industry futurist, says Microsoft "is like a government that was elected democratically some time ago, but the particular constitution under which it operates has no provision for another election." Even if Microsoft tried to keep others away from its domains, it failed, and there are plenty of choices in every area in which Microsoft has a large share of the market.

Who's Crying Now

Most of the statements about Microsoft being too much of a monopoly or being anti-competitive come not from customers, but from Microsoft's competitors. These other companies claim that, unless Microsoft is reined in, there will be almost no room for competition in the market and the user will be hurt.

■ *Microsoft was able to take a huge hunk of the market for all-in-one suites by dropping its price very low and keeping it there, not the kind of action that usually elicits complaints from consumers.*

Buit thats true right now: there are better operating systems that are getting nowhere due to the Microsoft marketing juggernaut. Any user can go out and buy them today, but only a few have chosen to do so. The operating system market has congealed around Microsoft products for the same reasons the mainframe market never shied away from IBM: comfort.

Even if Microsoft uses unfair, monopolistic practices in selling its applications, you don't hear many consumers complaining about it. Microsoft was able to take a huge hunk of the market for all-in-one suites by dropping its price very low and keeping it there, which is not the kind of action that usually elicits complaints from consumers. Many people think that the suites from Lotus and WordPerfect are better than Microsoft's, and probably neither competitor is losing money on their suite sales. Microsoft has much less of a lock on the application market than it does on the operating system market, as evidenced by its numerous failures in many important segments.

Making Versus Buying: Intuit

Late last year, Microsoft announced that it wanted to buy Intuit, the maker of the wildly popular (if bug-ridden) Quicken and TurboTax lines of software. Microsoft's competitor for Quicken, Microsoft Money, has a tiny share of the market, and nothing comes even close to Quicken for market share and ease of use. As soon as the proposed buyout was announced, many companies complained of the anti-trust implications.

That argument is somewhat spurious. Would those same companies have anything to complain about if Microsoft all of a sudden got more successful with Microsoft Money? Microsoft waited until it was perfectly clear that Quicken had no real competition, and then offered good money for it. Microsoft clearly wants to dominate that part of the applications market and move it forward in ways that even Intuit couldn't, such as pervasive home banking connected through the forthcoming Microsoft Network.

It would clearly be a Bad Thing for the software industry if Microsoft owned the market for all the major areas of software. Buying Intuit would give Microsoft an opportunity to almost completely take over yet another area. What would that mean for consumers (other than more of the same from Microsoft)? Probably not much in the short run. And it might not mean much in the long run either.

Anti-monopoly laws were designed to protect manufacturing industries that required a great deal of capital to get started; software isn't that way. Five people in a garage can come up with a new, better software thingy much more easily than they could start a small manufacturing business.

The resilience of the thousands of small software companies to the likes of Microsoft (and Lotus and WordPerfect...) is testimony to this. It isn't clear that we should start pulling in antitrust laws to help companies the size of Lotus, or even Borland, when smaller companies are growing under Microsoft's tyranny just fine.

The Alternatives Are Pretty Ugly

Even if you think that Microsoft's current monopolistic course should be curtailed by the government, the big question is, by whom? In the US, there are only two choices: a judge or the Department of Justice. In the past, both have acted to break up monopolies, but both have also bungled badly in major areas.

Do we really want a government that views cryptography as a munition, and prevents American companies from exporting software that is freely available everywhere else in the world, to be controlling the biggest manufacturer of operating systems? Do we really want a Department of Justice that was so threatened by Microsoft's lawyers that they came out with the wimpy consent decree deciding what do to with the company?

For that matter, do we want someone who could easily have become a federal judge based more on lucky campaign contributions than on merit or business acumen to decide how best to split up Microsoft?

In a company as complex as Microsoft, sending in the lawyer equivalent of the Army Corps of Engineers could be a very big mistake. It would most likely help Microsoft's competitors, but there is no assurance that the benefits would make it out to the users. This isn't to say that they couldn't; a smart and motivated Department of Justice could have clearly given Microsoft reason to start acting like a better corporate citizen years ago and defused the situation. Bill Gates knows that customer loyalty is not eternal, and being friendly with its competitors could make a difference if the public mood changes. But this Department of Justice isn't going to do any of that.

The current state of affairs is not that, and the users aren't demanding (or even asking for) any change that they couldn't just as easily implement with his spending decisions. They want simplicity and are willing to put up with mediocrity and high marketing in order to get it. That could change at any moment, and a bullying Microsoft could be turned on by more than just the software community. But the current US government is probably not the group to best effect that change. ■

Copyright © 1995 by Paul Hoffman. All rights reserved.

Stock Chart continued on page 18

Get your Multimedia 100MHz System at an incredibly low price!
Call Beta Nineties today and discover Quality and Value.

For computer service, upgrades, setup, networking, on-site service and more. We are just one phone call away from your office. Our mission is to provide good service and support to our customers. Please give us a call.

THE LEADER IN CUSTOMER SERVICE
WE'LL MAKE SURE YOU LEAVE FEELING SATISFIED BECAUSE YOUR SATISFACTION IS OUR BIGGEST GUARANTEE.
SALES • SUPPORT • 1 YEAR PARTS 2 YEARS LABOR WARRANTY • SERVICE

MULTIMEDIA PACKAGE
- Panasonic 2X CD-ROM Drive
- Sound Blaster 16 MCD Sound Card
- Pair of Amplified Speakers-50W
- 14 CD Titles (Compton's Encyclopedia, US Atlas, World Atlas and lots more!...)

$290

Upgrade your 286/386 System to 486DX2-66MHz M/B w/256K Cache, 486DX2-66 CPU & Cooling Fan.
$335
(Free Labor)
For other computer configurations and parts, please call.

486DX4-100MHz VLB MULTIMEDIA SYSTEM
486DX4-100MHz $1450

- AMD 486DX4-100MHz CPU
- 256K Ultra Fast External Cache
- CPU Cooling Fan & Heat Sink Unit
- 4MB Memory-70ns (72 pins)
- 1.44MB (3 1/2") Floppy Drives
- 540MB IDE Hard Drive
- 2H/2F VLB IDE Controller (2S, 1P, 1G)
- 32 Bit VLB SVGA Card w/1MB
- 15" Full Screen SVGA Non-Interlaced Monitor (1024x768, .28dp)
- 101 Enhanced Keyboard
- Mini Tower Case w/PS
- Serial Mouse & Pad
- Zoltrix 14.4K Internal Fax Modem
- Mitsumi Quad Speed (4X) CD-ROM
- 16 Bit Stereo Sound Card
- Pair of Stereo Speakers-50W

BETA NINETIES COMPUTER INC. & BETA 90'S NETWORK TECHNOLOGIES INC.

S.F. Westborough W. Orange 133 Southwood Center Ponderosa El Camino Real 280 380 82 101 N S.F. S.J.

South SF Office:
133 Southwood Center
So. SF, CA 94080
(415) 875-6682
Fax (415) 875-6683

Monday-Friday
9:00-6:30
Saturday 10-5
S.F. Office closed Saturday

MasterCard VISA

After business hours service available for networking.
1 Year Parts & 2 Years Labor
Warranty on Computer Systems Only
Prices subject to change w/o notice.
Not responsible for typographical errors.

Tech Support (415) 952-0388

Downtown SF Office:
74 New Montgomery St.
Suite 130
SF, CA 94105
(415) 974-1188
Fax (415) 974-1575

Insights *continued from page 17...*

TRAVELING INTO UNCHARTED WATERS: MICROTIMES INDEX HITS ANOTHER RECORD HIGH

Following in the footsteps of the Dow Industrials and the S&P 500, the MicroTimes Stock Index once again traveled into uncharted waters during the monthly trading session ended April 12.

Specifically, our indicator of thirty technology stocks hit a new record high of 6270.71 after rising another 227.75 points, or 3.77%, during the 28-day period. In comparison, the Dow Jones Industrial Average surged ahead 3.95% to a record high of 4197.81 (eclipsing the 4200 mark just seven days after surpassing the 4100 level on March 24) while the S&P 500 sprouted to a record high of its own, rising a hefty 3.11% to 507.17.

Of all the stocks in the nearby table, advancing issues outpaced declining stocks by an 18-to-12 margin. Additionally, those stocks hitting new 52-week highs blanked those falling to new 12-month lows by a resounding 14-to-0 count. This latter statistic illuminates the strong performance of technology stocks last month, which led the record-breaking performance of the MicroTimes Stock Index.

Turning to individual stocks in the MicroTimes Stock Index:

Investors tripped over themselves in an attempt to add shares of Adobe Systems to their portfolios last month. The reasons: the company posted higher-than-expected first-quarter earnings of $34.4 million and Adobe formed an alliance with IBM (up $5.38 last month to $87.13) to develop printing and publishing systems. The result: Adobe's share price spiraled upward $16.38 a share, or 44%, en route to a close of $53.63.

In Canada, Northern Telecom's stock approached a two-year high last month, rising 7.9% to $39.50. The reason for the optimism: expectations that it will win large contracts to build wireless phone networks in the United States.

Digital Equipment continued its phoenix-like ascent last month, rising a hefty $10.75 a share, or 33.5%, en route to a new 52-week high of $42.88. The stock was upgraded to "attractive" from "neutral" at PaineWebber.

Apple's share price headed north to the tune of $4 a share, or 11.4%, to $39. Last month, Oracle (down 75 cents to $32) confirmed publicly that it had recently made an overture to acquire the Cupertino-based concern. Also, rumors surfaced last month that Canon may make an acquisition offer for Apple for $54.50 a share. ■

EXCH	COMPANY	TICKER SYMBOL	CLOSING PRICE 03/15/95	CLOSING PRICE 04/12/95	NET CHANGE IN PERIOD	PERCENT CHANGE IN PERIOD	P/E RATIO	ANNUAL DIVIDEND RATE	ANNUAL DIVIDEND YIELD	ANNUAL HIGH	ANNUAL LOW
	SOFTWARE										
OTC	Adobe (H)	ADBE	37.25	53.63	16.38	43.96	168	0.20	0.37	53.75	23.50
OTC	Autodesk (H)	ACAD	41.50	42.00	0.50	1.20	37	0.24	0.57	44.00	23.25
OTC	Borland	BORL	9.25	8.00	-1.25	-13.51	-	0.00	0.00	14.38	6.00
OTC	Informix	IFMX	38.38	37.13	-1.25	-3.26	38	0.00	0.00	39.75	14.25
OTC	Lotus	LOTS	40.75	35.25	-5.50	-13.50	-	0.00	0.00	66.50	29.75
OTC	Microsoft (H)	MSFT	70.50	71.63	1.13	1.60	34	0.00	0.00	74.13	41.13
OTC	Novell	NOVL	19.25	21.50	2.25	11.69	41	0.00	0.00	21.50	13.38
OTC	Oracle (H)	ORCL	32.75	32.00	-0.75	-2.29	38	0.00	0.00	34.63	17.50
OTC	Software Publishing	SPCO	3.75	3.63	-0.13	-3.33	-	0.00	0.00	6.25	3.00
OTC	Symantec (H)	SYMC	23.00	20.88	-2.13	-9.24	29	0.00	0.00	24.50	9.88
	HARDWARE										
OTC	Apple	AAPL	35.00	39.00	4.00	11.43	10	0.48	1.23	48.06	24.63
OTC	AST Research	ASTA	15.50	17.25	1.75	11.29	-	0.00	0.00	20.00	10.38
NYS	Compaq	CPQ	32.25	32.00	-0.25	-0.78	10	0.00	0.00	44.38	29.50
NYS	Digital Equipment (H)	DEC	32.13	42.88	10.75	33.46	-	0.00	0.00	42.88	18.25
OTC	Dell	DELL	43.75	44.50	0.75	1.71	13	0.00	0.00	47.75	21.25
NYS	Hewlett-Packard (H)	HWP	120.25	122.25	2.00	1.66	17	1.20	0.98	125.00	71.88
NYS	IBM (H)	IBM	81.75	87.13	5.38	6.57	17	1.00	1.15	87.13	51.38
NYS	Silicon Graphics (H)	SGI	34.63	34.75	0.13	0.36	31	0.00	0.00	38.00	18.75
OTC	Sun Microsystems	SUNW	33.25	35.56	2.31	6.95	13	0.00	0.00	37.63	18.25
NYS	Xerox (H)	XRX	116.50	115.63	-0.88	-0.75	17	3.00	2.59	120.50	90.63
NYS	Tandy	TAN	47.00	48.38	1.38	2.93	17	0.72	1.49	52.38	31.00
	CPU'S										
NYS	Advanced Micro Devices (H)	AMD	34.63	34.50	-0.13	-0.36	11	0.00	0.00	36.88	22.25
OTC	Intel (H)	INTC	81.88	91.75	9.88	12.06	18	0.24	0.26	92.00	56.00
NYS	LSI Logic (H)	LSI	55.75	56.13	0.38	0.67	29	0.00	0.00	58.38	16.75
NYS	Motorola	MOT	56.88	54.50	-2.38	-4.18	20	0.40	0.73	64.75	42.13
	COMMUNICATIONS										
NYS	AT&T	T	52.13	51.38	-0.75	-1.44	16	1.32	2.57	57.13	47.25
NYS	BellSouth Corp.	BLS	59.00	61.50	2.50	4.24	14	2.76	4.49	63.50	50.50
OTC	MCI	MCIC	20.31	21.63	1.31	6.46	16	0.10	0.46	25.88	17.25
NYS	Northern Telecom (H)	NT	36.63	39.50	2.88	7.85	25	0.36	0.91	40.00	26.00
NYS	Pacific Telesis	PAC	30.38	30.25	-0.13	-0.41	11	2.18	7.21	33.38	28.00

KEY: NYS = NEW YORK ASE = AMERICAN OTC = OVER THE COUNTER
(H) = NEW HIGH REACHED IN PERIOD (L) = NEW LOW REACHED IN PERIOD

MARKET DIARY:

ADVANCES....................	18
DECLINES.....................	12
UNCHANGED................	0
NEW HIGHS..................	14
NEW LOWS..................	0

MOST ACTIVE ISSUES:

LARGEST DOLLAR GAINER....................	Adobe..................................	$	16.38
LARGEST DOLLAR LOSER......................	Lotus...................................	$	-5.50
LARGEST PERCENTAGE GAINER...........	Adobe..................................		43.96 %
LARGEST PERCENTAGE LOSER............	Borland................................		-13.51 %

	CLOSE 03/15/95	CLOSE 04/12/95	NET CHANGE IN PERIOD	PERCENT CHANGE IN PERIOD
MICROTIMES STOCK INDEX	6042.96	6270.71	227.75	3.77
DOW JONES INDUSTRIAL AVERAGE	4038.37	4197.81	159.44	3.95
STANDARD & POOR'S 500 INDEX	491.88	507.17	15.29	3.11
N.Y.S.E. COMPOSITE	266.15	274.04	7.89	2.96
NASDAQ COMPOSITE	807.38	828.53	21.15	2.62

CLOSING QUOTES FOR GRAPH:

DATE	MICRO TIMES	DOW JONES
08/19/94	5070.19	3755.11
09/16/94	5323.66	3933.35
10/27/94	5478.47	3875.15
12/16/94	5370.37	3807.19
01/18/95	5832.57	3928.98
02/16/95	5961.54	3987.52
03/15/95	6042.96	4038.37
04/12/95	6270.71	4197.81

Copyright Nordby International Inc., Boulder, Colorado

This information is based on sources believed to be reliable, and while extensive efforts are made to assure its accuracy, no guarantees can be made. Nordby International assumes no liability for any inaccuracies. For information on Nordby's customized financial research services, call 1-800-926-7404.

CLSI

Commend Line Systems, Inc.

Tel: (408) 980-9760
Fax: (408) 980-0968
E-mail: ayay@aol.com

3065 Olcott St.
Santa Clara, CA 95054
Store Hours:
M-F: 9:00-6:00 ▪ Sat: 10:00-4:00

7600 Series

- Intel Pentium™ CPU
- 1MB Video RAM
- 32-bit VESA Local Bus Video with Windows Accelerator
- 32-bit Local Bus IDE
- 16-bit Stereo Audio with 2 Stereo Speakers and 1 Microphone
- 8MB RAM Exp to 40MB
- Removable 340MB Hard Drive (520, 810MB optional)
- 3.5" 1.44MB FD Built-in
- Simultaneous CRT and LCD Operation
- Built-in 19mm Trackball
- 1 PCMCIA III or 2 PCMCIA Type II slots
- Extra large NiMH Battery
- 1 16C550 Compatible Serial Port
- 1 Parallel Port
- Other Ports: Ext. Keyboard, Ext. VGA Monitor & 200 Pin Connector for Docking Station
- Jacks - 1 line in and 1 line out
- 86-key Keyboard
- Carrying Bag and AC/Adapter
- Weight: 6.6 lbs with battery
- 11.14" W x 9.48" D x 2.09" H

8MB/340MB HDD	Pentium 75	Pentium 90
10.3" Color Dual Scan	$2495	$2695
9.5" Color Active Matrix	$3095	$3295

9500 Series

- 486DX CPU
- 1MB Video RAM
- 32-bit VESA Local Bus Video w/ Windows Accelerator
- 32-bit Local Bus IDE
- 256KB Secondary Cache Memory Expandable to 512KB or 1MB
- 16-bit Stereo Audio w/ 2 Stereo Speakers & 1 Mike
- 4MB RAM Expandable to 64MB
- Removable 340MB Hard Drive (520, 810MB optional)
- Removeable 3.5" 1.44MB Floppy Drive (optional CD ROM)
- CRT: 1024x768, 256 colors
- Simultaneous CRT and LCD Operation
- Integrated Pointing Device
- Advanced Power Management
- 2 PCMCIA Type II or 1 Type III slots
- Super Long Life NiMH Battery
- 2 16C550 Compatible Serial Ports
- 1 Parallel Port with ECP/EPP Support
- Other Ports: Game, Ext. Keyboard, Ext. VGA Monitor, Ext. FDD & 200 Pin Connector for Docking Station
- Jacks - 1 line in, 1 line out, 1 Microphone
- 85-key Keyboard
- Carrying Bag and AC/Adapter
- Weight: 7.5 lbs. with battery
- 11.69" W x 9.06" D x 2.44" H

4MB/340MB HDD	Dual Scan	Active Color
486DX2-66	$2125	$2735
486DX4-100	$2245	$2795

9200 Series

- 486DX CPU
- 4MB RAM on board expandable to 36MB
- 128KB Seconday Cache Memory
- Built-in 3.5", 1.44MB FDD
- Removeable 340MB Hard Drive (520, 810MB optional)
- 32-bit VL-Bus Interface with Windows Accelerator
- On board 1MB Video Display RAM
- Programmable Screen Saver
- Digital Controlled Brightness and Contrast
- Simultaneous CRT & LCD Operation
- Mono: 9.5" 640x480 VGA Display, 64 Gray Shades
- Color: 10.3" 640x480 Dual Scan or 9.5" Active Matrix Color VGA LCD Display, 256 Colors
- CRT: 1024x768, 256 Colors
- Record, Compress, Store and Playback Voice, Sound and Music
- SoundBlaster and MS Windows Sound System Compatible
- Built-in Microphone and Speaker
- PCMCIA 2.0 Standard Compliant
- 1 Type IV Slot (Support 2 Type II or 1 Type III & 1 Type II)
- 86-Key Enhanced Multi-Functional Keyboard
- Built-in 25mm Trackball

4MB/340MB HDD	Mono	Dual Scan	Active Color
486DX-33	$1425	$1865	$2495
486DX2-66	$1495	$1975	$2575
486DX4-100	$1575	$1995	$2645

MEMORY UPGRADE

7600 Series	$46/MB
9500 Series	$44/MB
9200 Series	$43/MB

HARD DISK UPGRADE

340 MB to 520 MB	**For Notebooks**	$135
520 MB to 810 MB		$200
340MB to 810 MB		$335

NOTEBOOK OPTIONS

PCMCIA 14.4 K Fax Modem
PCMCIA 28.8 K fax Modem
Battery Quick Charger
PCMCIA 2 x CD-ROM
PCMCIA Ethernet
PCMCIA Ethernet/Fax Modem
Portable Trackball
PCMCIA SCSI Adapter
Docking Station
Car Adapter
Numeric Keypad
Extra Battery

Free Financing Available

PORTABLE CD-ROM

Enhanced CD-ROM (Parallel Port)
(For Notebook or Desktop w/ carrying bag)

Sony 2X (external)	$295
Mitsumi 4X (External)	$365

Terms and Conditions: 1 year parts warranty • Lifetime Toll-Free Technical Support • 30-day money back guarantee (for Commendline brand products only) • Corp. 1000, University and Government P.O.'s welcome! • No surcharge for VISA and Mastercard • Prices subject to change without notice • Not responsible for typographical errors • All opened returns are subject to a 15% restocking fee • 14 process days for purchase refunds

CLSI

Commend Line Systems, Inc.

Tel: (408) 980-9760
Fax: (408) 980-0968
E-mail: ayay@aol.com

We are proud

Family Value Edition

- 486 PCI Mainboard
- 256K Cache (Upgradeable)
- 8 MB RAM (Upgradeable to 128MB)
- 3.5" 1.44 MB FDD
- 540 MB Enhanced IDE HDD
- PCI Enhanced IDE Controller (Built-in)
- 2-16550 High Speed Serial Ports (Built-in)
- 1-Parallel Port (Built-in)
- PCI SVGA Card w/1MB (Upgradeable to 2MB)
- Creative Labs 2X Internal CD-ROM
- Sound Blaster 16 Sound Card
- 20 High Educational Value Software Titles (New Grolier Encyclopedia The Cruncher Peter Pan, Speed, 3-D Dinosaur Adventure, Spell It, Kid Works - And More)
- Stereo Speakers
- Delux Mini Tower Case w/230W PSY
- 101 Key Enhanced Keyboard
- 14" 1024x768 .28 Ni Monitor (Low Radiation, Energy Saving, 2 year Warranty)
- Microsoft Compatible Serial Mouse w/ pad
- Microsoft DOS 6.22
- Microsot Windows 3.11

Intel DX2-66	**$1485**
AMD DX2-80	**$1455**
Intel DX4-100	**$1585**
AMD DX4-100	**$1535**

CLSI Premier MPC

- PCI BUS Mainboard
- 256K Cache (Upgradeable)
- 8 MB RAM (Upgradeable to 128MB)
- 3.5" 1.44 MB FDD
- 540 MB Enhanced IDE HDD
- PCI Enhanced IDE Controller (Built-in)
- 2-16550 High Speed Serial Ports (Built-in)
- 1-Parallel Port (Built-in)
- PCI SVGA Card w/1MB (Upgradeable to 2MB)
- Sony 55E Enhanced 2X Internal CD-ROM
- Sound Blaster 16 Sound Card
- Microsoft CD titles Bundle (MS Encarta Encyclopedia 95', MS Money, MS Works, MS entertainment - And More)
- Stereo Speakers
- Delux Mini Tower Case w/230W PSY
- Keytronic 101 Key Enhanced Keyboard
- 14" 1024x768 .28 Ni Monitor (Low Radiation, Energy Saving, 2 year Warranty)
- Microsoft Compatible Serial Mouse w/ pad
- Microsoft DOS 6.22
- Microsot Windows 3.11

AMD DX2-80	**$1415**
Intel DX2-66	**$1445**
Intel DX4-100	**$1545**
Pentium 75	**$1725**
Pentium 90	**$1895**
Pentium 100	**$2065**

Ultima PCI Multimedia

- PCI BUS Mainboard
- 256K Cache (Upgradeable)
- 8 MB RAM (Upgradeable to 128MB)
- 3.5" 1.44 MB FDD
- 540 MB Enhanced IDE HDD
- PCI Enhanced IDE Controller (Built-in)
- 2-16550 High Speed Serial Ports (Built-in)
- 1-Parallel Port (Built-in)
- PCI SVGA Card w/1MB (Upgradeable to 2MB)
- MITSUMI FX400 Enhanced 4X Int.CDROM
- Sound Blaster 16 Sound Card
- Microsoft CD titles Bundle (MS Encarta Encyclopedia 95', MS Money, MS Works, MS entertainment - And More)
- Stereo Speakers
- Delux Mini Tower Case w/230W PSY
- Keytronic 101 Key Enhanced Keyboard
- 15" 1280x1024 .28 Ni Monitor (Digital Control, Low Radiation, Energy Saving, 2 Year Warranty)
- Microsoft Serial Mouse w/ pad
- Microsoft DOS 6.22
- Microsot Windows 3.11

AMD DX2-80	**$1635**
Intel DX2-66	**$1665**
Intel DX4-100	**$1765**
Pentium 75	**$1945**
Pentium 90	**$2115**
Pentium 100	**$2285**

ADD-ON

14.4 K Fax Modem INT	$69
14.4 K Fax Modem EXT	$89
28.8 K Fax Modem INT	$129
US Robotics 14.4 K INT	$99
US Robotics 14.4 K EXT	$119
US Robotics 28.8 K INT	$209
US Robotics 28.8 K EXT	$225
1.2MB FDD	$45

HARD DISK UPGRADE

540 MB to 850 MB (IDE)	$95
850 MB to 1.2 GB (IDE)	$165
540 MB to 1.2 GB (IDE)	$260

CASE UPGRADE

Delux Mini to Desktop	$10
Delux Mini to Delux Mid	$25
Delux Mini to Full Tower	$45

ALL SYSTEMS ARE UPGRADEABLE!

VGA CARD UPGRADE

PCI SVGA /1MB to Stealth 64/2 MB DRAM	$105
STEALTHE 64/2 MB DRAM to Stealth 64/2 MB VRAM	$120
STEALTH 64/2MB VRAM to Stealth 64/4 MB VRAM	$180
STEALTH 64/ 2 MB VRAM to ATI TURBO/2 MB VRAM	$90
ATI TURBO/2 MB VRAM to ATI TURBO/4 MB VRAM	$210

Terms and Conditions: 1 year parts warranty • Lifetime Toll-Free Technical Support • 30-day money back guarantee (for Commendline brand products only) • Corp. 1000, University and Government P.O.'s welcome! • No surcharge for VISA and Mastercard • Prices subject to change without notice • Not responsible for typographical errors • All opened returns are subject to a 15% restocking fee • 14 process days for purchase refunds

VISA MasterCard DISCOVER

# of our products & deliver the best price!

Supreme Multimedia

- **Intel Triton Chipset Mainboard**
- 256K Cache (Upgradeable to 512K)
- **16 MB RAM**
- 3.5" 1.44 MB FDD
- **1.2 GB Enhanced IDE HDD**
- **PCI Enhanced IDE Controller**
- 2-16550 High Speed Serial Ports
- 1-Parallel Port
- **Diamond Stealth 64 Video Card with 2 MB VRAM**
- **MITSUMI FX400 Enhanced 4X Int CD-ROM**
- Sound Blaster 16 Sound Card
- Delux Mid Tower Case w/230W PSY
- 40W Stereo Speakers
- Keytronic 101 Key Enhanced Keyboard
- **15" 1280x1024 .28 Ni Monitor (Digital Control, Low Radiation, Energy Saving, 2 Year Warranty)**
- Microsoft Serial Mouse w/ pad
- Microsoft DOS 6.22
- Microsot Windows 3.11
- **Microsoft Office Professional 4.3 (CD ROM Version)**

Pentium 75	**$3065**
Pentium 90	**$3235**
Pentium 100	**$3405**

PCI Multimedia Advanced

- **Intel Triton Chipset Mainboard**
- 256K Cache (Upgradeable to 512K)
- **16 MB RAM**
- 3.5" 1.44 MB FDD
- **1.0 GB Fast SCSI II HDD**
- **Advansys 940 PCI SCSI Controller**
- PCI Enhanced IDE Controller
- 2-16550 High Speed Serial Ports
- 1-Parallel Port
- **Diamond Stealth 64 Video Card with 2 MB VRAM**
- **TOSHIBA 3601B 4.4 X SCSI II Int CD-ROM**
- Sound Blaster 16 Sound Card
- Delux Mid Tower Case w/230W PSY
- 40W Stereo Speakers
- Keytronic 101 Key Enhanced Keyboard
- **15" 12804x1024 .28 Ni Monitor (Digital Control, Low Radiation, Energy Saving, 2 Year Warranty)**
- Microsoft Serial Mouse w/ pad
- Microsoft DOS 6.22
- Microsot Windows 3.11
- **Microsoft Office Professional 4.3 (CD ROM Version)**

Pentium 75	**$3405**
Pentium 90	**$3575**
Pentium 100	**$3745**

Network Solutions

- Windows NT
- Windows NT AS
- Windows for Workgroup
- UNIX
- OS/2
- E-Mail Gateway
- File server
- Tape Back-Up Server
- Printer Server FAX Server
- CD-ROM Server Database Server

Novell Certified NetWare Engineer

PLEASE CALL FOR CUSTOMIZED NETWORKS

- Novell Netware 3.12
- Novell Netware 4.1
- Windows NT 3.5 Server
- Windows NT 3.5 Workstation
- APC -UPS
- APC Powerchute Plus
- 3 COM Etherlink
- Intel EtherExpress
- SMC Elite Ultra
- Microdyne NE-2000+
- Hub & Transceivers
- Cable & Accessories

Novell Certified NetWare Engineer

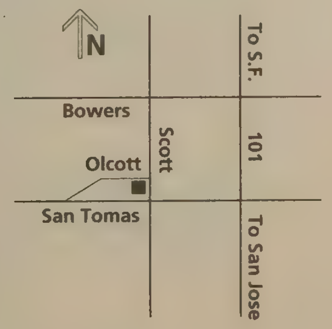
CONSULTATION, INSTALLATION, TROUBLE SHOOTING

Monitor Upgrades

TO FROM	MAG DX15F 1280-1024 28 NI	Hitachi CM1586 1280-1024 .28 NI FL	Optiquest 2000DC 1280-1024 .27 NI	ViewSonic 15G 1024-768 .28 NI	Nokia 449E 1280-1024 .28 NI	Sony 15SF 1280-1024 .25 NI	NEC XV15 1024-768 28 NI	NEC XP15 1024-768 .28 NI OP	Impression IMP-7 1280-1024 .28 NI	Optiquest 4000DS 1280-1024 .27 NI	MAG DX17F 1280-1024 26 NI
14" NI	**179**	**189**	**209**	**219**	**239**	**239**	**249**	**465**	**429**	**439**	**479**
15" NI	**79**	**89**	**109**	**119**	**139**	**139**	**149**	**365**	**329**	**339**	**379**

TO FROM	Hitachi NS1764 1280-1024 .26 NI FL	KFC CA1718 1280-1024 .26 NI FL	ViewSonic 17G 1280-1024 .28 NI	Optiquest 4000TC 1280-1024 .25 NI	ViewSonic 17 1600-1280 .27 NI	Sony 17SF 1280-1024 25 NI	MAG MXP17F 1600-1280 .26 NI FL	NEC XE17 1024-768 .28 NI	Sony 17SE 1600-1280 .25 NI	Nokia 447X 1600-1280 25 NI	NEC XP17 1280-1024 28 NI OP
14" NI	**509**	**555**	**559**	**609**	**659**	**679**	**725**	**795**	**799**	**859**	**1009**
15" NI	**409**	**455**	**459**	**509**	**559**	**579**	**625**	**695**	**699**	**759**	**999**

3065 Olcott St.
Santa Clara, CA
95054 U.S.A.



MediaMagic: A One-Stop Reseller Profit Center

Maximize Multimedia Profits with MediaMagic!

The computer industry is abuzz with multimedia. In fact, it's the hottest trend since the PC was first introduced more than a decade ago. Because customers are investing in multimedia with phenomenal enthusiasm, the profit potential is fantastic. How do you take advantage of this opportunity? With our Dream Magic Reseller Program. Call today and find out how you can make big sales with MediaMagic's popular multimedia products.

It's the Best View!

Multimedia demands a top-notch display, and MediaMagic has sharp, high-quality monitors at the best prices.

MediaMagic Monitor

- 15-Inch, Flat Display with 1280 x 1024 Resolution
- Non-Interlaced, 0.28 Dot Pitch
- Silica-Coated, Non-Glare Surface
- VESA, Flicker-Free Refresh Rate
- EPA Energy Star Compliant with VLF Low Emission

The Hottest Technology Pentium PC System

MediaMagic's Pentium desktop system sets a higher standard of excellence, and offers a host of popular upgrade options including Microsoft Office Standard.

MediaMagic [illegible] System

- Intel "Zappa" Motherboard (Triton Chipset)
- 90MHz Intel Pentium CPU Installed
- Supports Latest EDO Memory
- 256KB L2 Cache Fast Page Mode
- FCC Class B Desktop Chassis with 200W UL Power Supply
- Technical Support Hotline
- MS-DOS and Windows for Workgroups
- A Range of Popular Expansion Options Including Microsoft Office 4.2, HDD

Multimedia On the Road

Notebooks are hot sellers today. And MediaMagic's notebooks are off the charts with performance and value.

MediaMagic MiniNote Notebook

- 9.5-Inch, STN Display
- Advanced Power Management
- Weight with Battery: Only 4.8 lbs.

MediaMagic Panorama Notebook

- 11.3-Inch, DSTN Display
- Sophisticated, Business Audio Features
- Fast CPU performance

Upgrade Your Profits

MediaMagic's multimedia upgrade kits transform regular PCs into multimedia profits. Customers love these kits because they install quickly and save the cost of a complete new multimedia computer.

Compton's Interactive Encyclopedia

MediaMagic Multimedia Upgrade Kit Includes

- Quad-Speed CD-ROM Drive
- Stereo Speakers
- 16-Bit Sound Card
- Compton's Multimedia Encyclopedia
- Collection of Popular CD Software

Resellers Call Today!

MEI

(510) 226-8799

Fax: (510)226-8798

MEDIAMAGIC™

©1995 MEI, Inc. All rights reserved. Intel DX4, DX2, DX are trademarks of Intel Corp. Microsoft is a registered trademark and Windows and the Windows logo are trademarks of Microsoft Corp.
All other company names and products are trademarks or registered trademarks of their respective owners. Specifications are subject to change without notice. We are not responsible for errors in typography and photography.

BY JIM WARREN

REALIZABLE FANTASIES

They're *Our* Public Records. We *Still* Want 'Em! *Now!*

Last year, California state Senator Quentin Kopp (Ind., San Francisco) introduced Senate Bill 95, which would have reformed the California Public Records Act (CPRA). Most notably for our readers, it would have clarified public access to computer copies of the public parts of already-computerized records held by state and local agencies.

SB 95 went down in flames, blown out of the sky by city and county officials, horrified at the prospect that the public might have *modern* (computerized) access to the public's records of local deeds and misdeeds—especially, *Gawd forbid!*, without generating significant profits for the cities and counties or their high-profit, private-sector information monopolists.

But Kopp continues his delusion that the public should have modern access to public records. In February, he introduced yet another attempt to mandate modern citizen access—Senate Bill 323.

[Full disclosure: I wrote the first draft of most of the computer-access language of SB 95 and SB 323, and reviewed the final draft before Kopp submitted it to the Legislative Counsel's wordsmiths.]

Only Applies To *Public* Data

One smoke-screen belched forth by frantic bureaucrats opposing SB 323 alleges that it will somehow harm privacy of personal information held by state or local agencies. *Not so!*

The Public Records Act *only* applies to *public* information.

There are literally thousands of CPRA exemptions for state and local government records, often concerned with protecting corporate information and the privacy of personal information—especially the privacy of government staff and officials.

It turns out that no one knows how many exemptions there are, since they are splattered all over the voluminous state statutes and endless self-serving "findings" by local and state agencies' legal beagles. SB 323 would remedy that by creating an index of exemptions.

Here are some notable examples from among the thousands of government records, public access exemptions:

- Most disciplinary records about errant teachers are protected from the prying eyes of parents.
- Most records of police misconduct are sealed away from those disgusting, nosy reporters and citizen groups.
- The presence of paroled felons is kept secret from communities where they are paroled—illustrated not long ago by the rapist, paroled after a few years in prison, who chopped off the arms of his victim.

> WE CITIZENS WILL REMAIN IGNORANT SLAVES OF OUR GOVERNMENT UNTIL AND UNLESS WE FINALLY GAIN TIMELY ACCESS TO ADEQUATE INFORMATION, IN USEFUL AND ECONOMICAL FORM, ON WHICH TO BASE SOUND DECISIONS ABOUT THE ACTIVITIES—AND ABUSES—OF OUR GOVERNMENT.

- Medical and dental patients and legal clients are protected from the trauma of seeing most complaints filed against their physicians or attorneys.
- DMV records are sealed from "public" access. (However, direct-mail solicitors and other commercial DMV "clients" who are considered "legitimate" users pay hundreds of thousands of dollars annually to buy your and my driver and vehicle records.)

SB 323 Would Clarify Modern Public Access

Here are the key components of SB 323's computer-assisted, public access mandates, excerpted from the bill text and from the state Senate Judiciary Committee's bill analysis (italics and bracketed sarcasm added):

Under existing law, "public records" are

Fantasies *continued...*

defined as "any writing containing information relating to the conduct of the public's business prepared, owned, used or retained by any state or local agency regardless of physical form or characteristics." ["Writing" is currently defined by laboriously enumerating a variety of forms including, "punched cards, discs, drums, and other documents."]

SB 323 would delete that definition and "writing containing information." Instead, a record would be any [already public] "information, writing, data, sounds, and images [notably including geographic and map data that agencies dearly hope to sell for big bucks to the elite few who can afford 'em] ...including directories, indices, cross-indices, and cross-references..." [on the off-chance that citizens might want to be able to find something].

Existing law provides that "computer data shall be provided in a form determined by the agency."

E.g., several years ago, Palo Alto resident Gene Wallis requested a copy of that city's spreadsheet-created budget on a diskette. When asked why, he said, "So I can analyze it, myself." He was promptly told that he could only have it in paper form. Wallis reported that when he asked why, the clerk said, "Oh, you might modify it!"

SB 323 would replace that ambiguous provision, and mandate in 6253(c) that, "A copy of computerized data shall be provided in any form that is requested *from any of the alternative forms used by the controlling agency*, including any forms used by the agency to make copies for its own use. *An agency shall not be required to make records available in any form other than those forms used by the agency*."

In spite of the clarity of the reiterated statements in italics, opposing propagandists are terrifying naive officials by saying that agencies would have to produce data in any form requested, and create data they don't already have.

Direct Access *NOT* Mandated

In spite of there being absolutely *no* mandate that the public have direct access to agency computer systems, but only to *copies* of their *public* records, the bill analysis says, "Opponents argue that this provision could threaten the privacy rights of the citizens about whom agencies keep records [*horse puckey!*—data that's public, by definition, ain't private; and if it's nonpublic, then it remains private!]. They argue that facilitating direct access to agency computerized information would make it too easy for confidential information about people to be disclosed."

Officials that can't protect the privacy of personal information in agency computers need to be replaced with competent professionals.

Agency Profits Pre-empt Public Access

The bill analysis reports that the California State Association of Counties (CSAC) stated:

> This provision could allow private companies to obtain computer programs and computer data, and use them for commercial profit-making [job-producing, tax-paying] purposes without allowing the public agency the ability to recover the actual cost of developing or compiling the data and making it available.
>
> The County of Santa Clara has a particular economic concern about this provision. It is concerned that requiring it to provide computerized data in computerized form to anyone who asks, will threaten its license agreement with Barclay Mapworks. The County has recently executed a 5 year exclusive license agreement with that company for use of the county's copyrighted "cadastral base map". The agreement provides for payments to the County of a minimum of $100,000 per year.

Assure Access And Privacy

Currently agencies often plead that they can't provide computer copies of public data because public and private data is commingled, or because they require proprietary software or agency-developed software—that our taxes paid for. Addressing these excuses for refusing public access, Sec. 6253.3 of SB 323 mandates that:

> Public agencies shall ensure, to the extent technologically and economically feasible, that systems used to collect and hold public records purchased or created by the agency after January 1, 1996, be designed to ensure ease of public access to public records. At a minimum, records systems shall meet the following requirements:
>
> (a) Allow for computer-assisted redaction [fancy lawyer's word meaning "deletion"] of exempt information from an otherwise disclosable record. [This further emphasizes that nonpublic information remains "private"—available only to the multitude of government agencies that collect and share it while building an ever-tightening web of citizen surveillance, hidden from public scrutiny.]

"The County has recently executed a 5 year exclusive license agreement with Barclay Mapworks for use of the county's copyrighted 'cadastral base map' ".

> (b) Allow for production of copies of public records in a format generally acknowledged as being an industry-standard format for information exchange between computer programs. [This upsets some database and systems vendors, who'd much prefer suckering agencies into buying their proprietary systems from which the agencies have costly difficulty escaping when newer, better, cheaper alternatives become available.]
>
> (c) Allow for provision by agencies of copies on computer information storage media of all materials produced by the agency or any consultant to the agency for elected or appointed decision-makers in connection with any matter that is placed on an agenda for discussion, deliberation, or action on open session during a public meeting pursuant to the Ralph M. Brown Act [applies to local agencies and executive-branch state agencies] or the Bagley-Keene Open Meeting Act [applies, in a limited way, to state legislative meetings].
>
> [I.e., if information is to be the subject of a public hearing covered by the open-meetings laws, then the information should be covered by the open-records law, and available in computerized form. These days, it almost always *is* prepared using a word processor or spreadsheet program, but many officials are very coy about letting the public have copies in such useful formats.]
>
> (d) Allow for timely public access to copies of all computerized public records by way of the largest nonprofit, nonproprietary, public computer network. Implementation of the network-based, computer-assisted public access shall

MULTIMEDIA SYSTEMS

Expand Your Capabilities. Extend The Possibilities.

Compare the Quality, Features, Price and Performance.

PENTIUM 100MHz FULL TOWER

- Full Tower Chassis w/250 Watt PWS
- Intel Pentium 100MHz CPU w/Fan
- VL/PCI-Bus Motherboard w/256K Cache
- 8MB Main Memory
- 1.2MB & 1.44MB Floppy Drives
- 540MB IDE Hard Disk Drive
- Double Speed CD-ROM Drive
- 16-Bit Sound Card with Joystick/Midi Port
- VL or PCI-Bus 1MB SVGA Card
- VL or PCI Controller w/2 Serial/1 Parallel Ports
- 101 Key Keyboard
- Microsoft Compatible 3-Button Serial Mouse
- CD-Pak Included
- MSDOS 6.22 and Windows 3.11
- Stereo Speakers
- 15" Non-Interlaced .28 SVGA Monitor

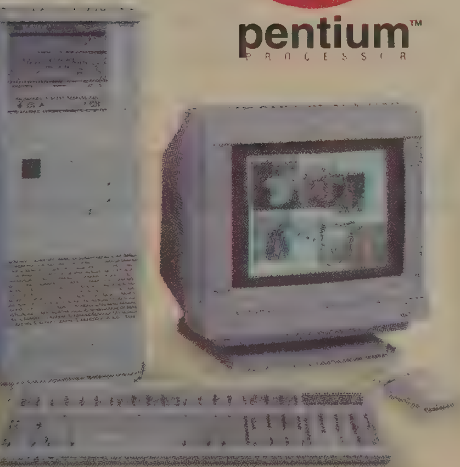
$2425

PENTIUM 90MHz FULL TOWER

- Full Tower Chassis w/250 Watt PWS
- Intel Pentium 90MHz CPU w/Fan
- VL/PCI-Bus Motherboard w/256K Cache
- 8MB Main Memory
- 1.2MB & 1.44MB Floppy Drives
- 540MB IDE Hard Disk Drive
- Double Speed CD-ROM Drive
- 16-Bit Sound Card with Joystick/Midi Port
- VL or PCI-Bus 1MB SVGA Card
- VL or PCI Controller w/2 Serial/1 Parallel Ports
- 101 Key Keyboard
- Microsoft Compatible 3-Button Serial Mouse
- CD-Pak Included
- MSDOS 6.22 and Windows 3.11
- Stereo Speakers
- 15" Non-Interlaced .28 SVGA Monitor

$2230

intel inside
pentium™ PROCESSOR



486DX4-100MHz DESKTOP

- Desktop Chassis w/Front Panel Speakers
- Intel 80486DX4-100MHz CPU w/Fan
- VL-Bus Motherboard w/256K Cache
- 8MB Main Memory
- 1.2MB & 1.44MB Floppy Drives
- 420MB IDE Hard Disk Drive
- Double Speed CD-ROM Drive
- 16-Bit Sound Card with Joystick/Midi Port
- VL-Bus SVGA Card w/1MB Memory
- VL-Bus Controller w/2 Serial/1 Parallel Ports
- 101 Key Keyboard
- Microsoft Compatible 3-Button Serial Mouse
- CD-Pak Included
- MSDOS 6.22 and Windows 3.11
- 14" Non-Interlaced .28 SVGA Monitor

$1550

486DX2-66MHz DESKTOP

- Desktop Chassis w/Front Panel Speakers
- Intel 80486DX2-66MHz CPU w/Fan
- VL-Bus Motherboard w/256K Cache
- 4MB Main Memory
- 1.2MB & 1.44MB Floppy Drives
- 420MB IDE Hard Disk Drive
- Double Speed CD-ROM Drive
- 16-Bit Sound Card with Joystick/Midi Port
- VL-Bus SVGA Card w/1MB Memory
- VL-Bus Controller w/2 Serial/1 Parallel Ports
- 101 Key Keyboard
- Microsoft Compatible 3-Button Serial Mouse
- CD-Pak Included
- MSDOS 6.22 and Windows 3.11
- 14" Non-Interlaced .28 SVGA Monitor

$1325

PENTIUM 75MHz MID TOWER

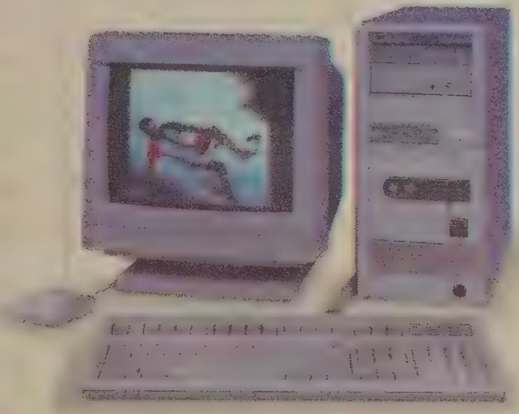
- Mid Tower Chassis w/200 Watt PWS
- Intel Pentium 75MHz CPU w/Fan
- VL/PCI-Bus Motherboard w/256K Cache
- 8MB Main Memory
- 1.2MB & 1.44MB Floppy Drives
- 420MB IDE Hard Disk Drive
- Double Speed CD-ROM Drive
- 16-Bit Sound Card with Joystick/Midi Port
- VL or PCI-Bus 1MB SVGA Card
- VL or PCI-Bus Controller w/2 Serial/1 Parallel Ports
- 101 Key Keyboard
- Microsoft Compatible 3-Button Serial Mouse
- CD-Pak Included
- MSDOS 6.22 and Windows 3.11
- 14" Non-Interlaced .28 SVGA Monitor

$1815

486DX4-100MHz MID TOWER

- Mid Tower Chassis w/200 Watt PWS
- Intel 80486DX4-100MHz CPU w/Fan
- VL-Bus Motherboard w/256K Cache
- 8MB Main Memory
- 1.2MB & 1.44MB Floppy Drives
- 420MB IDE Hard Disk Drive
- Double Speed CD-ROM Drive
- 16-Bit Sound Card with Joystick/Midi Port
- VL-Bus SVGA Card w/1MB Memory
- VL-Bus Controller w/2 Serial/1 Parallel Ports
- 101 Key Keyboard
- Microsoft Compatible 3-Button Serial Mouse
- CD-Pak Included
- MSDOS 6.22 and Windows 3.11
- 14" Non-Interlaced .28 SVGA Monitor

$1575



EXCLUSIVE OPTIONS

2MB VL-Bus SVGA Adapter	$150
Creative Labs Sound Blaster-16 Upgrade	$45
14,400 Fax/Modem with Bitcom/Bitfax	$75
17" Non-Interlaced .28 SVGA Monitor	$Call
250MB Colorado Tape Backup	$150
Quad Speed CD-ROM Upgrade	$100

BOLData™ SYSTEMS **Call 1-800-923-BOLD** **Fax:510-490-9428**

Prices subject to change without notice. © 1995. BOLD DATA SYSTEMS. Intel & Intel Inside Logo are Trademarks of Intel Corporation. All other names are properties of their respective owners.

VISA

COMPUTERLAND OF SERRAMONTE

APPLE®

APPLE® POWERBOOK®

POWERBOOK 150, 4/120	$1347
POWERBOOK 520, 4/160	$1570
POWERBOOK 520, 4/240	CALL
POWERBOOK 520C, 4/160	$2059
POWERBOOK 520C, 4/240	CALL
POWERBOOK 520C,12/320/Mdm.	$2941
POWERBOOK 540C, 4/320	$3599
POWERBOOK 540C,12/500/Mdm.	$4415

APPLE® MACINTOSH QUADRA®

APPLE MACINTOSH QUADRA® 630, 4/250

$967

APPLE POWER MACINTOSH™

POWER MACINTOSH 6100/66, 8/350	CALL
POWER MACINTOSH 6100/66, 8/350/CD	CALL
POWER MACINTOSH 6100/66, 16/500/CD/DOS CARD	CALL
POWER MACINTOSH 7100/80, 8/500	CALL
POWER MACINTOSH 7100/80, 8/700/CD	CALL
POWER MACINTOSH 7100/80, 16/700/CD/AV	CALL

PLEASE CALL FOR AVAILABILITY & PRICE ON
POWER MACINTOSH 8100/100
POWER MACINTOSH 8100/110

Authorized Reseller

Apple Printers

Apple Color StyleWriter® Pro	$589
Apple Personal LaserWriter® 320	$869
Apple LaserWriter Select® 360	$1449
Apple LaserWriter 16 / 600 PS	CALL

TOSHIBA

T2100/4MB/ 260MB HD	$1441
T2100CS/4MB/ 350MB HD	$2246
T2100CT/8MB /350MB HD	$3094
T1960CT/4MB/ 200MB HD	$2450
T1960CT/4MB/320MB HD	$2642
T2400CT/8MB/250MB HD	$2955
T2400CT/8MB/320MB HD	$3027
T2450CT/8MB/320 MB HD	$3985
T2450CT/8MB/500 MB HD	$4282
T4850CT/8MB/520MB HD	$4536
T4850CT/8MB/810MB HD	$4833

Apple® Macintosh® Performa® 6115 CD

- 8MB OF RAM, 350MB HD
- 15 INCH COLOR DISPLAY
- DOUBLE SPEED CD-ROM DRIVE
- KEYBOARD AND MOUSE
- FAX MODEM
- FREE SOFTWARE

IN STOCK

Apple® Performa® 630 CD

- 8MB OF RAM, 250MB HD
- 14 INCH COLOR DISPLAY
- DOUBLE SPEED CD-ROM DRIVE
- KEYBOARD AND MOUSE
- FAX MODEM
- FREE SOFTWARE

CALL

COMPAQ

CONTURA AERO 4/33C, 170MB HD	$1502
CONTURA AERO 4/33C, 250MB HD	$1690
CONTURA 410C, 4MB RAM 350MB HD	$2830
CONTURA 410CX,4MB RAM 350MB HD	$2358
LTE ELITE 4/50CX, MODEL 340	$4331
LTE ELITE 4/75CX, MODEL 340	$4745
LTE ELITE 4/75CX, MODEL 510	$5027
DESKPRO 575 MODEL 420/W	$2,110
DESKPRO 575 MODEL 420/CDS	$2,348
DESKPRO 575 MODEL 420/TR	$2,299
DESKPRO 575 MODEL 720/MX	$2,799
DESKPRO 590 MODEL 420/W	$2,419
DESKPRO 590 MODEL 420/CDS	$2,658
DESKPRO 590 MODEL 420/TR	$2,611
DESKPRO 590 MODEL 720/MX	$3,112
DESKPRO 575 MINITOWER 720/W	$2,619
DESKPRO 575 MINITOWER 720/MX	$2,859
DESKPRO 590 MINITOWER 420/TR	$2,668
DESKPRO 5100 MINITOWER 720/W	$3,122
DESKPRO 5100 MINITOWER 720/MX	$3,360

HEWLETT PACKARD

DESKWRITER 540..IN STOCK!

DESKJET 540 COLOR	$279
DESKJET 560C COLOR	$457
LASERJET 4L	$499
LASERJET 4ML POSTSCRIPT	$989
LASERJET 4P	$939
LASERJET 4MP	$1339
LASERJET 4 PLUS	$1399
LASERJET 4M PLUS	$1926
LASERJET 4V	$1899
LASERJET 4MV	$2749
DESKJET 1200C	$969
DESKJET 1200C/PS	$1553

SCANNERS

SCANJET 3P FOR PC	$469
SCANJET 3P FOR MAC	$469
SCANJET 3C COLOR , MAC	CALL
SCANJET 3C COLOR, IBM	CALL

IBM IBM

THINKPAD 755C, 4MB/170MB HD.	$3137
THINKPAD 755C, 4MB/340MB HD.	$3325
THINKPAD 755C, 4MB/540MB HD.	$3666
THINKPAD 755CE,8MB/340MB HD.	$5470
THINKPAD 755CE,8MB/540MB HD.	$5812

CLEARANCE SECTION

ITEMS ARE BRAND NEW!

MICROSOFT C/C++	$99
RASTER OPS SWEET 16 16" DISPLAY	$749
NEC MULTI MEDIA CD ROM GALLERY INCLUDES 2X SPEED CD-ROM	$149

OKIDATA

MICROLINE 320 PRINTER	$302
MICROLINE 321 PRINTER	$423
OL 400E PRINTER	$410
OL 410E PRINTER	$643

AUTHORIZED SERVICE

We have a highly trained and experienced Service Department that can provide your companywith a variety of services. Our professional staff can assist you with the following:

ON-SITE & CARRY-IN REPAIRS
UPGRADES & SERVICE CONTRACTS
CONFIGURATION & INSTALLATION

Call the Service Department at (415) 615-0101

OPEN Mon.–Fri. 9a.m.–6p.m.

409 So. Spruce Ave.
South San Francisco, CA 94080

Call Now! While Available!
(415)•615•9020

- *Not responsible for typographical errors*
- *Prices subject to change without notice*
- *Prices subject to stock on hand*

Fax: (415)•615•0844

ensure the protection and security of all data stored on or copied onto computer systems controlled by the agency. .

[I.e., local and state agencies should arrange to make their already-computerized, already-public, already-available public records available via the Internet, rather than requiring that every citizen wishing to receive timely, efficient, energy-conserving access to grovel before some distant officialdom when permitted during office hours.]

(e) Nothing in this section shall require the agency to violate any copyright, patent, trade secret, or any contract provisions made with a vendor prior to January 1, 1996. No agency shall be obligated to provide technical support or copies of manuals and documentation, expect those created by the agency, regarding the processing of the requested public records.

Sunnyvale City Council member, Landon Curt Noll *(chongo@ncd.com)*, who works in the real world for Networking Computing Devices, excerpted these key sections from SB 323 and posted them widely across the Net in late March, along with his strong statement of support.

It's great to see some computer- and net-literate people starting to occupy public decision-making positions. Unfortunately, too many city, county, and state officials and bureaucrats are more antiquated or self-serving. Clearly, they have been in their positions of power and arrogance much too long for the public's well-being.

We citizens will remain ignorant slaves of our government until and unless we finally gain *timely* access to *adequate* information, in useful and economical form, on which to base *sound* decisions about the activities—and abuses—of our government.

If you care to participate in the process of your own governance, send your one-page, concise letter to SB 323 author Sen. Quentin Kopp, State Capitol, Sacramento, CA 95814; fax: (916)327-2186. Discuss questions with his aide, Dan Friedlander, (916)445-0503.

Copyright © 1995 by Jim Warren; email: jwarren@well.com; 345 Swett Rd., Woodside, CA 94062. Permission herewith granted to copy-in-full for any nonprofit use.

Pentium PCI System Multimedia
*Pentium PCI/ISA, 256K Built-in Enhanced IDE & Fast IO
*Cooling fan w./Heat Sink
*16MB-70ns Simms, 72 Pins
*540MB IDE Hard Disk Drive
*1.44MB Floppy Disk Drive
*Mid-Tower Case w./230W PS
*17" SVGA .28 NI. Monitor
*Diamond Stealth 64 2MB PCI
*MS Mouse and 101 Keyboard
*Teac 4X AT Int. CD-ROM
*Sound Blaster 16 Sound Card
*30W Ampl. Stereo Speakers
100MHz.................$2,825
90MHz..................$2,655
60MHz..................$2,395

Super Pentium PCI File Sever
*PCI/ISA, 256K Zif and 72Pins
*Cooling fan w./Heat Sink
*16MB-70ns Simms, 72 Pins
*2.1GB Fast SCSI-II HDD
*1.44MB Floppy Disk Drive
*PCI Adaptec SCSI-II Card
*2 Serial and 1 Parelle Ports
*Full-Tower Case w./250W PS
*14" Mono Monitor
*Mono Graphic Card
*101 Keyboard
100MHz.................$2,870
90MHz..................$2,665
60MHz..................$2,415
AP600 Smart UPS.........$335
Power Chute+for Novell...$75

486 PCI System Multimedia
*AIR PI 486 PCI/ISA, Built-in Enhanced IDE & Fast IO, 256K
*Cooling fan w./Heat Sink
*8MB-70ns Simms, 72 Pins
*540MB IDE Hard Disk Drive
*1.44MB Floppy Disk Drive
*Mid-Tower Case w./230W PS
*15" SVGA .28 NI. Monitor
*Cirrus Logic 1MB PCI
*MS Mouse and 101 Keyboard
*Teac 4X AT Int. CD-ROM
*Sound Blaster 16Sound Card
*30W Ampl. Stereo Speakers
486DX4/100Mhz...$1,645
486DX2/80MHz....$1,595
486DX2/66MHz...$1,565

Warranty:All system with 1-year on parts and life-time on Tech. Support

SCSI Hard Disk Drive
Seagate
ST32550N 2.1GB 9MS...$1,029
ST32550W 2.1GB 9MS..$1,079
ST15150N 4.3GB 9MS...$1,540
ST410800N 9.1GB10MS$3,149
MicroplΩs
MC1343 4.3GB 10MS.....$1,445
MC1991 9.1GB 10MS.....$2,725
MC1991AV 9.1GB 10MS$2,840
Quantum
QM30540MVS 540MB.....$209
QM2100S 2.1GB 9MS......$895

SCSI Tape Back Up
Conner 2GB Python4320...$785
Conner 4GB Python4324...$865
Conner 8GB Python4326...$975
HP35470DAT 2GB...........$795
HP35480DAT 4GB...........$870
*** HDD and Tape Backup Ext. SCSI Devices Add $115 only!**

Adaptec SCSI Controller
AHA2940 PCI SCSI-II......$182
2842 VLB SCSI-II.............$195
1542CF ISA SCSI-II..........$175
2742 EISA SCSI-II............$355

CD-ROM & Sound Card
Sony 2X 55E IDE Int.........$112
Teac 4X 55AT IDE Int.......$169
Toshiba 3501B SCSI-II......$292
Plextor 4X SCSI-II 43CH...$415
SB 16 Sound Card..............$69
~~SB 16 SCSI-II Sound Card...$99~~
80W Stereo Speaker............$45

Special
Diamond Stealth 32 VLB 2MB DRAM........Only $112

IDE Hard Disk Drive
170MB/210MB...........$115/130
250MB/340MB...........$145/159
420MB/540MB...........$169/187
730MB/850MB...........$235/269
1GB/1.2GB................$349/389

486/586 Mothboard
AIR 486PI PCI w./Built-in fast IO & Enhanced IDE(256K)$187
P90/100 ASUS w./Built-in fast IO & Enhanced IDE(256K)$285
Inte Pentium 90 w./Built-in fast IO & Enhanced IDE(256K)$305

Net Work Products
NE2000 TP/BNC/C....$29/29/31
ISA Ethernet MCA Combo.$115
VLB/PCI Ethernet Combo....$95
PCMCIA Ethernet Combo..$145
9/16 Ports TP Hub.......$150/295
2/4Port Coax Repeater.$225/335
3COM 3C509 16 Bit TP/BNC/ Combo for Single.$102/104/155
>>>SMC E-16 Ultra 10-BaseT Single/24Pk..............$69/1,395

Terms Condition
*Leasing, Finance & Terms Available for Qualified firms
*On-Site Sevice on Request

Fine Tec Tel.:(408)980-8189 VISA MasterCard

3270 Keller St., Suite 102, Santa Clara, CA95054; Fax:(408)980-1807; EMail:FT Company@aol.com

*Gov't, University & Firms PO on approval *Not responsible for typos*Price subject change without notice *Order for items not listed available, CALL

DESKTOP COMPUTERS
Apple® AST COMPAQ IBM
Call

HARD DRIVES
CONNER
420MB IDE CFS-420A 14ms...$166
540MB IDE CFS-540A 14ms...$188
1.2GB IDE CFA-1275A 12ms ..$398

SOUND CARDS
CREATIVE
CREATIVE LABS, INC.
Sound Blaster 16 MultiCD/w ASP..$68/156
Sound Blaster 16 SCSI-2/wASP.......$98/186
Sound Blaster AWE-32 ....$256

VIDEO CARDS
ORCHID
Kelvin 64, VLB or PCI
1MB/2MB $116/158

NOTEBOOK COMPUTERS
Apple® COMPAQ IBM TOSHIBA
Call

CD-ROM DRIVES
SONY
55E 2X IDE $104
55S 2X SCSI...........$160
PLEXTOR
PX43CH 4X $398
PX43CH/SCSI $438

NETWORK CARDS
SMC
Elite Ultra 16-Bit
Coax/TP $93/91
Elite Ultra 16-Bit
Combo/6 pack $98/538

FAX MODEMS
Sport288V34 Ext 28.8K
Data/Fax $238
Sportster144 Ext 14.4K
Data/Fax $106

CD SOFTWARE
Call
For List.

CPU's
486DX2-66...............$184
486DX4-100....................$258
Pentium 586-90 ....$578
Pentium 586-100 ....$738

MEMORY MODULES
TOSHIBA (60ns, 72-Pin)
1x36, 4M..........................$164
2x36, 8M..........................$328
4x36, 16M........................$508
8x36, 32M........................$998

DENNIS International Corp.
37217 Fremont Blvd. #A, Fremont, CA 94536
1-800-318-9991
Fax 510-795-9218 • Mon-Sat 10-6
VISA We sell name brand products at the lowest guaranteed prices.

PALMTOPS • BY MITSU HADEISHI

Look, Ma, No Wires!

Motorola Envoy Combines Magic Cap With Wireless Communications

Shipping at last, the long-awaited Envoy from Motorola isn't the first PDA based on the General Magic Magic Cap operating system; the Sony Magic Link, reviewed in an earlier column, has that distinction. The Envoy has a particular feature, however, lacking in the Magic Link: it communicates without wires. Using the ARDIS cellular digital packet network, the Motorola Envoy can both send and receive messages and other information without the need for a wire-line telephone connection. The ARDIS network serves most medium- and large-sized cities in the United States, and is used for connectivity with the RadioMail and AT&T PersonaLink email services.

This means from wherever you happen to be, in your car, in the office, or walking down the street, the Envoy can send and receive email messages instantly.

The Envoy: Who Needs It?

What are the tradeoffs for this kind of connectivity?

Well, first of all, the Envoy costs more than the Sony Magic Link, retailing for around $1500 vs. $900 for the Sony. In addition, to accommodate the cellular digital packet modem, the Envoy ends up weighing half a pound more, 1.7lbs. Finally, the unit is a bit larger, measuring 7.6" x 5.8" x 1.2", about half an inch taller and a quarter-inch thicker than the Magic Link. RAM on the Envoy is the same as the Sony, 1MB.

However, 1.7lbs. is still a lot lighter than even the lightest subnotebook computer, and the price, while higher than many average consumers may be willing to spend, could be within the range of the busy executive with a need for information on the go. And this is precisely the market Motorola's targeting: executives and other business users with a work-related use for something with the Envoy's functionality, and the willingness and wherewithal to spend what it takes.

The first targeted audience for personal digital assistants was the general consumer population; while this is a laudable goal and still the ultimate Holy Grail for most PDA manufacturers, the fact is that most vendors have realized that the units are too expensive for the average user. The business user, however, is more likely to have a real need for wireless connectivity, and is also more likely to be willing to spend $1500 for such a device. Only time will tell how well this theory holds up in reality.

Features And Applications

As I've discussed in previous columns, the Magic Cap operating system at the heart of both the Envoy and the Magic Link includes an easy-to-use graphical user interface, on-screen "virtual keyboard" (no handwriting recognition is attempted), and a cute (some might say overly cute) spatial metaphor for getting at the various functions that are available in the unit.

For example, you start out sitting at your virtual desktop surrounded by things like an in box, an out box, and various desk accessories (a calendar for scheduling appointments, a notepad, and so forth). From there you can read your mail, compose and send new messages, etc. Typical organizer functions are available from your desktop. You can also look in the virtual drawers of your desk and find various applications such as Pocket Quicken (built into the unit).

To gain access to even more functionality, you tap on the "Hallway" arrow at the top right of the screen, and you're transported to a virtual hall setting, allowing you to walk around to more complex areas such as the library or the control panel. From there you can leave the building and enter the "town," filled with various buildings representing services that are currently available from your unit, such as America Online or AT&T PersonaLink Messaging.

The ARDIS wireless network currently allows access to both RadioMail and AT&T PersonaLink Messaging. Both of these services

90 Days Same as Cash Leasing Available!

The Corporate Specialist Special Govt, Educational, & Hospital Prices!

Lifetime Labor Warranty on all Compatibles! All Systems Use High Quality Brand Name Components

Pentium-90 PCI

256K Cache, 8MB RAM,
850MB Hard Drive, 1.44 FD,
PCI 2MB Video Card,
15" SVGA .28 NI Monitor,
PCI IDE/IO, Minitower Case,
101 Keyboard, MS Mouse,
MS DOS, & MS Windows ***1989**

Leasing Available!

Pentium-75 PCI

256K Cache, 8MB RAM,
750MB Hard Drive, 1.44 FD,
PCI 1MB Video Card,
15" SVGA .28 NI Monitor,
PCI IDE/IO, Minitower Case,
101 Keyboard, MS Mouse,
MS DOS, & MS Windows ***1749**

Leasing Available!

486DX2-66 VLB

256K Cache, 4MB RAM,
500MB Hard Drive, 1.44 FD,
VLB 1MB Video Card,
14" SVGA .28 NI Monitor,
VLB IDE/IO, Minitower Case,
101 Keyboard, MS Mouse,
MS DOS, & MS Windows ***1159**

Leasing Available!

MULTIMEDIA UPGRADES

Creative Labs

Sound Blaster Value CD
2X CD-ROM, 16-Bit Sound Blaster
12 Titles ***269**

Sound Blaster Discovery CD

4X CD-ROM, Sound Blaster
18 Titles, Speakers ***389**

80 Watt Speakers	*59
16 Bit Sound Blaster	*99

COMPAQ

Contura Aero 4/33C 4/170	*1489
Contura Aero 4/33C 4/250	1689
Contura 410CX 486DX2-50 4/350	2769
Contura 410C 486DX2-50 4/350	2299
LTE Elite 486DX-75 CX 8/510	4939
LTE Elite 486DX2-50 CX 8/340	4259
ProLinea MT 486DX2-66 8/525	1799
ProLinea MT Pentium-75	CALL
ProLinea MT Pentium-90	CALL
DeskPro XL Pentium-75 8/535	2999
DeskPro XL Pentium-90 16/535	3399
DeskPro Pentium-100 16/1.05	3669
ProSignia 300	CALL
ProSignia 500	CALL
ProLiant 1000/1500/2000/4000	CALL

HEWLETT PACKARD

DeskJet 560C	*469
DeskJet 540	299
DeskJet 1200C	969
DeskJet 1200C/PS	1499
LaserJet 4 Plus	1369
LaserJet 4M Plus	1869
LaserJet 4si	2859
Portable 320 w/Cut Sheet Feeder	349
LaserJet 4MV	2747
HP Scanjet IIcx	899
HP OmniBook 600 Series	CALL
HP Palmtop Computer	CALL
HP Vectra All Models	CALL
HP Plotter All Models	CALL

TOSHIBA

T2400CS 4/250	*2275
T2400CS 4/320	2445
T2400CT 8/250	2899
T2450CT 8/320	3899
T2450CT 8/500	4169
T3600CT 8/500	3659
T4800CT 8/500	4099
T4850CT 8/810	4709
T4900CT Pentium 8/775	5359

IBM

ThinkPad 360 CSE 4/340	CALL
ThinkPad 360 CE 4/340	CALL
ThinkPad 360 CE 4/540	CALL
ThinkPad 755C 4/340 DX2-50	CALL
ThinkPad 755C 4/540 DX4-75	CALL
Performance VP All Models	CALL
PC Server 300, 320, 350D, 720	CALL
IBM PC 350,730,7550	CALL

TEXAS INSTRUMENTS

TM 4000 WIN DX2-50 4/340 Dual Scan	*2089
TM 4000 WIN DX2-50 4/455 Active	2559
TM 4000 WIN DX4-75 4/455 Active	3199
TM 4000 WIN DX4-75 4/455 Dual Scan	2729
TM 4000 WIN DX4-100 4/524 Active	4099
TM 5000 P-75 8/500 Dual Scan/PCI	4799
TM 5000 P-75 8/775 Active/PCI	5399

AST RESEARCH INC.

ACSIENTIA

810N 486DX2-66 Dual Scan 4/510	*2629
910 486DX2-50 Dual Scan 8/340	2679
910 486DX4-75 Dual Scan 8/510	2999
910 486DX4-75 Active 8/510	3899

BRAVO

MS-T P-75 Model 1	*1629
MS-T P-75 16/1GB	2439
MS-T P-75 8/540	1859
MS-T P-90 Model 1	1999
MS-T P-90 8/540	2199

NOTEBOOK MEMORY & ACCESSORIES

Toshiba

T1900 Series 4MB/8MB	*219/399
T2400 Series 4MB/8MB	219/389
T3400 3600 Series 4MB/8MB	219/389
T4700, T4800 Series 4MB/8MB	219/399

Compaq

Contura 4/25 4MB/8MB	*199/379
Contura 400 Series 4MB/8MB	229/419
LTE Elite 4MB/8MB/16MB	209/359/729

IBM

ThinkPad 350, 360 Series 4MB/8MB	*209/369
ThinkPad 700, 750 755S 4MB/8MB	229/399

Texas Instruments

TM 4000E Series 4MB/16MB	*229/929
TM 4000M Series 4MB/16MB	229/999

AST

AST Bravo NB 4MB/8MB	*209/629
AST Ascientia 800, 900 4MB/8MB	209/699
PCMCIA 14.4 Fax/Data Modem	179
PCMCIA EtherNet Card	139
PCMCIA ENet/14.4 Modem Combo	479
Targus Universal Nylon Case	39

LASER PRINTERS

Epson

Action Laser 1100	*409
Action Laser 1500	539
Action Laser 1600	769

Panasonic

KXP4400	*469
KXP4430	679
KXP4440	999

Texas Instruments

MicroWriter PS/23	*609
MicroWriter PS/65	799
MicroWriter 610	409
MicroWriter 640	699

Okidata

OL 400E	*479
OL 410E	649

Business Solutions & Services

Microsoft® SOLUTION PROVIDER

Microsoft NT & NT Server Installations
Available by Experts!!
Software Development and Maintenance
at Economical Rates.
Database Development and Graphical
User Interface Design and Implementation.

NETWORK SUPPORT

Novell Netware - Lantastic
Windows NT - AppleTalk
Complete Novell Support by Trained CNE's
at Very Nominal Rates

PROGRAMMING LANGUAGES

Visual Basic - Objective C - C++
Cobol - LISP - Pascal

SOFTWARE IMPLEMENTATION

Accounting Systems - Databases
Desktop Publishing - Communication
Utilities - We specialize in software
integration into your business.

HARDWARE PACKAGES

Systems - Plotters - Printers
Scanners - Portable Solutions
We can provide the right solution
for your needs.

Authorized Dealer: APPLE • AST • COMPAQ • DIGITAL • EPSON • HEWLETT PACKARD • MICROSOFT • MICROTEK • OKIDATA • RADIUS • SUPERMAC • TEXAS INSTRUMENTS

California Computer Company

Since 1987

(510) 785-3850 Fax (510) 783-5128
3401 Investment Blvd., Suite 3, Hayward, CA 94545
email: califcomp@aol.com

1-800-308-3850

Hours
M-F 9-5:30

Government, Education, Hospital & Corp. PO's Welcome. Ad Reflects Cash Prices. Prices subject to change without notice. Not responsible for typographical errors. Logos are property of their respective companies.

allow email to be sent to and received from addresses all over the Internet and elsewhere (CompuServe, America Online, and so forth). Unfortunately, RadioMail, like AT&T PersonaLink, uses cryptic numeric addresses which are nearly impossible to remember. Any friends of yours who want to send email to your Envoy had better either have a mail alias defined or be exceptionally good at memorizing long numbers. However, email gets sent instantly and wirelessly, a great time-saver when you're on the run, although it only works as long as the batteries are strong enough.

Which brings me to the subject of battery life; the unit seems to have a usable battery life of around eight hours. However, the cellular modem seems to turn itself off after only about four hours or so of use. So, although you can still use your unit for a while after that, you won't be able to send email wirelessly until you have recharged your unit (you could also use the standard 2400 baud modem also built into the machine). This does mean the Envoy will stay at least partially usable for more than twice as long as the average laptop, however.

RESOURCES:

AllPen Software
(408)399-8800

Motorola Envoy
Motorola Marco
Motorola, Inc.
1-800-894-7353

PenCell Spreadsheet
PenWare, Inc.
(415)858-4920

Sony PIC-1000 Magic Link
Sony Corporation
1-800-342-5721

The screen on the Envoy is fairly hard to read; no matter what contrast setting you use, it's somewhat difficult to see the display. This is a fault shared by the Sony Magic Link as well, and something that should be addressed in future versions of both machines.

A disappointing omission from the built-in tools is the PenCell spreadsheet, which is included with the Sony Magic Link. A spreadsheet is a very useful general-purpose tool that can be used in the place of a lot of special-purpose applications; what's more, it's easy for the average user to create specialized spreadsheets to do everything from budget computations to travel planning. My guess is that the Envoy was pushing the envelope in terms of price, so they decided they couldn't afford to bundle the spreadsheet. Fortunately, it's available from PenWare as an add-on for $200, although that's distributed on a floppy which means it takes up valuable RAM when loaded. On the other hand, the unit comes with the productivity software Pocket Quicken, which will serve the needs of a lot of users for their basic personal finance and checkbook balancing needs.

An interesting fact is that the Envoy is being sold only through a limited number of specialized vendors across the country. Motorola is not distributing this device via standard consumer retail channels at all—you need to contact Motorola and find the outlet nearest you. The unit is clearly aimed at the business professional, not the ordinary consumer. By contrast, the Sony Magic Link is targeted directly at consumers; they can be found throughout the country at most major electronics stores.

Security And Agents

For those of you worried about the security of email transmitted openly through the airwaves, AT&T PersonaLink plans to unveil its own wireless network (independent of ARDIS) within the next several months. This network will allow encrypted point-to-point transmissions of email and other information, as well as allowing the Envoy to fully employ the Telescript intelligent network protocol.

With Telescript, the Envoy can send out "agents" which will carry out a variety of tasks for the user on the network. For example, an agent could be sent out with the instruction to find the lowest price on hotel rooms in the city you're visiting. The Telescript agent would go out and search for the information, returning only after it had gathered the information you were seeking. This saves money for the Envoy user, in theory, because the agent doesn't utilize the wireless network until it has finished its task (as opposed to a normal interactive search which would require constant sending and receiving of data packets). Since CDPD networks typically charge users by the packet sent, it's useful to have this sort of technology in a wireless device.

Unfortunately, of course, neither the PersonaLink wireless network nor very many services that support Telescript are yet available.

Motorola Marco

In addition to the new General Magic-based Envoy, Motorola is simultaneously shipping the Marco, an Apple Newton-based PDA which also has a Motorola cellular digital packet data modem.

Like the Envoy, the Marco features access to the nationwide ARDIS network and RadioMail. In addition, the Marco supports the ARDIS Personal Messaging email network. Unlike RadioMail, ARDIS Personal Messaging is designed primarily for sending email to recipients who are also using ARDIS Personal Messaging. It does not yet include gateways to the popular email systems such as the Internet or CompuServe.

Although the Envoy and the Marco share a common wireless interface, the two units run entirely different operating systems. The Marco uses the familiar Newton notebook metaphor; the Envoy of course uses the cute icons of General Magic's Magic Cap interface. Marco users can of course utilize any of the hardware or software packages currently available for the Apple Newton.

Pricing for the unit is currently expected to range from $900 to $1400, depending on options and features. The wireless modem makes the weight of the Marco 1.8lbs, about the same as the Envoy. The CDPD modem also increases the size of the unit to 7.5" x 5.8" x 1.4".

As with the Envoy, Motorola is also marketing the Marco through just a few select wireless distributors.

Web From Your Newton

Back in the early days of the home PC, people used to talk about how they could be used for all sorts of great household tasks, such as, for example, filing recipes (why is it that no one ever mentions this these days?).

One of the other purported benefits was gaining access to vast Computer Databases; many people mistakenly thought that all they needed was a Commodore PET and they would suddenly have access to Many Amazing Things. Well, as it turned out, you also needed a modem, and modems in those days were excruciatingly slow. And, even if you had a modem, there wasn't a whole lot that was exciting to do online.

The Internet has changed all that forever. The Internet has been growing by leaps and bounds, primarily because of its adherence to the idea that the best way to organize things is via a kind of cooperative anarchy. Suddenly, ENVISIONS **Scanner Showroom**

826 MAHLER ROAD • BURLINGAME • 415/692-3163

Test Drive a Scanner and Save!

Discover the world of affordable scanners at our one-of-a-kind showroom located in Burlingame. Envisions, the nation's leading direct source for scanning solutions, now offers local computer users the opportunity to try before they buy.

Our showroom is the best place to find answers to all of your scanning questions while you get a hands-on demonstration of the scanner and software you're considering. Once you've decided, you can take home your scanner at unbeatable savings!

Envisions is well-known to readers of *Computer Shopper* and *Windows Sources* as the source of the best deals on scanners and software. In fact, we've won *Shopper's* Best Buy award for three years in a row.

As good as our advertised prices are, though, we've reserved the best bargains for our showroom customers. The Envisions showroom is the only place you can try out specially priced scanner and software bundles that offer top-notch scanning performance at rock-bottom prices.

The Envisions showroom features scanning solutions that are perfect for desktop publishing, text scanning (with the latest in optical character recognition software), electronic filing, optical storage, and more. We can tell you about the latest innovations in each of these areas, and we can show you how a scanning system will revolutionize the way you work.

Come by today and find out how a scanner will make you more productive, without draining your budget. Remember, quantities are limited!

ENV-COLOR HANDSCANNER

Palm-Sized Scanning Power

$199

- FREE Corel Draw 4, Xerox TextBridge & Halo Desktop Imager!
- 800-dpi resolution for crisp detail
- 24-bit, 16.8 million colors
- 256 grays & line art
- Includes manual, interface card & driver disk

ENVISIONS 6600S FLATBED

Affordable Graphics Excellence

$499

- FREE Corel Draw 4!
- 4800 x 4800 dpi Enhanced Resolution 300 x 600 dpi Optical Resolution
- High-speed, single-pass scanning engine
- 24-bit, 16.8 million colors

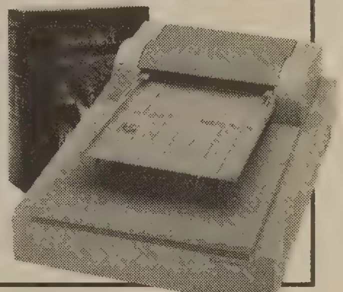
FREE COREL DRAW!

PAGE VACUUM PROFESSIONAL

High-Speed Document Storage

$999

- FREE Recollect!
- High speed/volume scanning at 10 pages per minute
- Manufactured by Ricoh
- 256 grays, 400 dpi
- Includes interface card
- Built-in 30-page document feeder

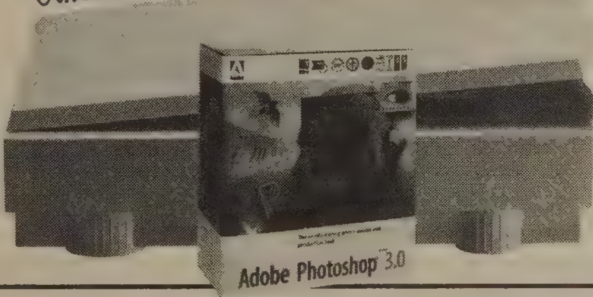


ENVISIONS 8800S FLATBED

Professional-Strength DTP Scanning

- FREE Adobe Photoshop 3.0!
- 6400 x 6400 dpi Enhanced Resolution 400 x 800 dpi Optical Resolution
- 24-bit, 16.8 million brilliant colors
- High-speed, single-pass scanning engine – 12 times faster than the Microtek IIHR!
- Includes manual, interface card & driver disk

Outscans any Microtek or HP flatbed!



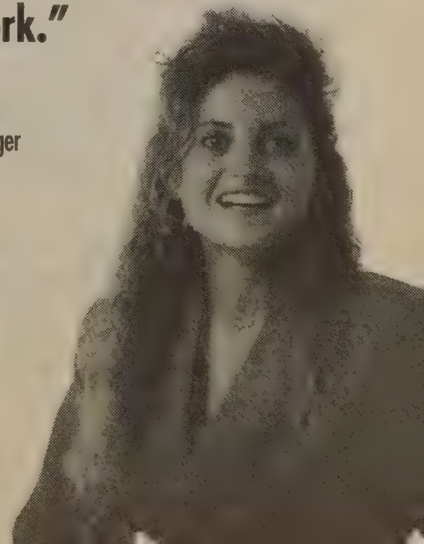
$699

AFTER $100 INSTANT REBATE

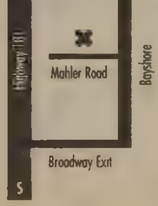
EXPIRES JUNE 30!

"Let me show you how a scanner can enhance your productivity, improve your designs, and give you control over all of your paperwork."

Jennifer Jann,
Showroom Manager



Directions: From 101 North, take Broadway Exit to Bayshore North. Make left turn onto Mahler at second light, to #826. From 101 South, take Millbrae Ave. Exit to Bayshore South. Make right turn onto Mahler at third light, to #826.



415/692-3163

TUESDAY-FRIDAY 10-5, SATURDAY 10-2

FAX 415/259-8149

without planning but with a lot of enthusiasm, the dream of vast quantities of information has come into being. The World Wide Web is the primary vehicle for this sudden transformation of the cyberscape.

What makes the Web so unique is that it's so easy to "publish" on the Web. Almost anyone can get an account on a system and set up their own home page, sticking whatever they find interesting on it. Want to find out the latest information on, let's say, whale watching? (I just picked that subject off the top of my head). OK, type in "whale.watching" into the Lycos Web search engine, and boom! I get a list of pages devoted to whale watching. Jump to the first page and boom! a recording of a whale song. Click on another link—a beautiful picture of a whale and her baby. Click again—information on how to go whale watching off the coast of California and Oregon.

Using the Web for shopping is also a reality now; the Web can be used to purchase anything from books to computer equipment, even hothouse flowers in Hawaii. These are things that had been talked about for years but it took the Internet and the WWW to bring to fruition.

PDAs in particular have been touted for quick searches through computer databases to get up-to-date information about things like hotel accomodations or restaurants. The whole concept of Telescript, for example, is based on this notion of the best use of a PDA. Telescript, however, is a proprietary system which runs only on Magic Cap-based PDAs at present. There are very few services which employ Telescript, and it may be a while before this catches on. On the other hand, the Web is a wide open standard, and for this reason it has exploded in popularity.

PDAs have yet to have a quick and easy interface to the Web which could be used from anywhere in the world. However, AllPen has gone the first step by creating its own HTML browser for the Apple Newton which can connect to a Mac server which can in turn be connected via TCP/IP to the Web. Unfortunately, this technology does not allow the Newton to directly connect to the Web via, say, a PPP link, so it's still at least one step away from being a full Web solution for Newton users. However, it's a promising first step, and it's a feature that would be interesting to see on new PDAs from other companies. ■

Copyright © 1995 by Mitsu Hadeishi. All rights reserved.

Introducing The

MicroTimes Quotation Hotline

The Free, Convenient And Easy Way To Receive Pricing Quotations On All Your Computer Needs!

COMPUTER SHOPPING MADE EASY

The MicroTimes Quotation Hotline: It's Free, Easy and Convenient!

Whether you work for a large corporation or are buying for your personal use, the MicroTimes Quotation Hotline can help you gather pricing ***Information Quickly, Easily and for Free*** from a wide variety of computer resellers through the support of *MicroTimes* magazine.

Just fill out the form on the opposite page so you can receive information directly from our advertisers on the exact computer products you are interested in. Our advertisers will respond to your requests directly by fax, phone, mail, or e-mail...whichever way you choose.

To ensure accuracy, please read the following information and instructions:

1. All requests for quotation must use the form attached so that the Optical Reading software (OCR) can read it accurately. Do not send requests for quotation on your own letterhead because the software will not read any other text except for the text areas provided in the form.

2. Please fill in all the information legibly. By filling in the boxes neatly and legibly our OCR software can read your requests for quotation accurately. This will also ensure that your request is easier for advertisers to respond to your needs.

3. Do not cut inside the dotted line.

4. If you are asking for multiple systems and/or computer products in the same category but with different specifications, please use additional forms. This will ensure that your requests for quotation will be responded to accurately and without any confusion from *MicroTimes* advertisers.

5. Be familiar with the particular computer products you are interested in. Be specific about the various products, system processors, speeds, hard drive sizes, features, as well as the particular configuration that you are interested in. This will ensure that you get an accurate response.

When You're Finished, Please Fax The Completed Form To:

1-800-496-8008

To accurately process your quotation request, please print like the example to the right, without touching the box sides. Thank you.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

0 1 2 3 4 5 6 7 8 9

Please shade circles like this > ●
and not with check or crossed marks > Ø ⊗

MicroTimes *Quotation Hotline* Fax forms to: 1-800-496-8008

48940

DIRECTIONS: Please Do Not Use A Cover Sheet. Only legible and completed forms can be processed. You may make copies of this form for multiple requests. Copy at 100% of actual size, do not reduce in size. When you fax your form(s), you may want to note that the forms have been placed properly into the fax machine to avoid faxing the form's backsides. Shade or fill in any circles that apply and print neatly within the boxes without touching the box sides.

First Name
Last Name

Number of Employees
○ 1 to 10 ○ 50 to 100
○ 10 to 50 ○ Over 100

Company Name
Title

What Is Your Purchase Time Frame?
○ 1 Week ○ 3 Weeks
○ 2 Weeks ○ 4 Weeks

Address

Please Rank Your Choice
H=High L=Low
Ⓗ Ⓛ Price Ⓗ Ⓛ Service
Ⓗ Ⓛ Reseller Ⓗ Ⓛ Warranty
Ⓗ Ⓛ Onsite Support
Ⓗ Ⓛ Compatibles
Ⓗ Ⓛ Brand Name

City
State
Zip Code

Area Code Phone Number ☐☐☐ - ☐☐☐ - ☐☐☐☐
Area Code Fax Number ☐☐☐ - ☐☐☐ - ☐☐☐☐

To Be Used Where ? ○ Business ○ Home ○ Network

E-Mail Address

E-mail address (continued)

I Would Like To Receive My Quotation Sent To Me By:
○ Fax ○ Phone ○ E Mail ○ Mail

When requesting different types of systems or multiple systems types make copies of this form at 100% of actual size, do not reduce in size. Fill in your number of forms to follow.

Enter # Of Requested Forms ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

"Advertisers' Quotation of the Day!" Your Shopping Made Easy. Our advertisers have packaged all your needs for one stop easy shopping. Please indicate your selections by shading (fill in) the circles that apply and print neatly within the boxes without touching the box sides.

STEP ONE: PICK A SYSTEM.

○ PC COMPATIBLE ○ MACINTOSH
○ PC NAME BRAND ○ Network WORKSTATION
○ PC NOTEBOOK ○ Network FILESERVER
○ MACINTOSH NOTEBOOK

PICK YOUR PREFERENCES
○ Name Brand
○ Compatibles
○ No Preference

Step 1: Enter PC System Brand Name & Model #. If Preference

Step 1: Enter NoteBook Brand Name & Model #. If Preference

Quantity / Choices
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 10 or More ○

My Budget For System Is ○ Under $1000 ○ $1000 to $1999 ○ $2000 to $2999 ○ $3000 to $3999 ○ $4000 to $4999 ○ Over $5000

Call Me For A More Detailed Quote. ○
Quote Me For Selected Upgrade/Peripherals Choices Only. ○

STEP TWO: CONFIGURATION REQUESTS:

CPU ○ PENTIUM ○ 486 ○ 386 ○ MAC QUADRA/PERFORMA ○ MACPOWER PC

CPU MHz SPEED:
○ DX4 ○ DX2 ○ DX ○ SX ○ SLC ○ Quadra ○ PowerPC
○ 100 ○ 90 ○ 80 ○ 75 ○ 66 ○ 60 ○ 50 ○ 40 ○ 33 ○ 25

BUS TYPE ○ PCI ○ VLB ○ EISA ○ ISA

CACHE ○ 64K ○ 128K ○ 256K ○ 512K

RAM: ○ 1MB ○ 2MB ○ 4MB ○ 8MB ○ 16MB ○ 32MB ○ 64MB ○ 128MB

HARD DISK DRIVE: ○ 100MB+ ○ 300MB+ ○ 500MB+ ○ 1GB+ ○ 4GB+
○ IDE ○ SCSI ○ 200MB+ ○ 400MB+ ○ 700MB+ ○ 2GB+ ○ 8GB+

MONITOR: ○ SVGA ○ VGA ○ MONO ○ 26 DPI
○ 14" ○ 15" ○ 17" ○ Non Interlace ○ 28 DPI
○ 20" ○ 21" ○ Multisync

FLOPPY DRIVE: ○ 1.44MB and/or ○ 1.2MB

FAX MODEM: ○ Internal ○ External ○ 9600bps ○ 14400bps ○ 28800bps

CASE TYPE: ○ Mid Tower ○ Desktop ○ Full Tower

VIDEO CARD RAM ○ 512KB ○ 1MB ○ 2MB ○ 3MB ○ 4MB

POINTING INPUT DEVICES: ○ Any Mouse ○ MS Mouse ○ Keyboard
○ Serial ○ Bus ○ PS2 ○ Trackball ○ Joystick ○ Ball Point ○ Pen

OPERATING SOFTWARES NEEDED: ○ DOS ○ OS2 ○ Mac ○ UNIX ○ MS Windows

STEP THREE: MULTIMEDIA UPGRADE

○ Please Add To Step 1 & 2 Quotation ○ Please Quote Me Separately

CD ROM DRIVE: ○ Internal ○ IDE ○ SCSI ○ External
CD ROM TITLES INCLUDED: ○ 1-5 ○ 5-10 ○ 11+

SPEED ○ 2X ○ 3X ○ 4X

○ BRAND NAME ○ No Brand Name Preference
CD ROM Brand Name and Model Number

SOUND CARD ○ 16Bit ○ 32Bit

SPEAKERS
○ Less Than 25W
○ 25 to 50W
○ 50 to 75W
○ More Than 75W

STEP FOUR: NOTEBOOK SECTION - Please Note You Must Make Choices In Steps 1 & 2 To Complete Step 4

SCREEN TYPE: ○ Mono ○ Dual Scan Color ○ Active Color

PCMCIA SLOT: ○ Type I ○ Type II ○ Type III ○ Type IV

○ Audio Capable ○ Docking Station
○ Fax Modem ○ Extra Battery

STEP FIVE: NETWORKING NEEDS:

○ Please Contact Me on My Networking Needs Indicated Below
○ Software ○ Hardware ○ Consultation ○ Design ○ Installation ○ Administration ○ MS Workgroups
○ Users 2 to 10 ○ Users 10 to 50 ○ Users Over 50 ○ Lantastic ○ Apple Talk ○ Novell ○ MS NT

STEP SIX: UPGRADES and PERIPHERALS.

○ Ink Jet Printer ○ Tape Backup ○ Accelerator
○ Color Printer ○ Dot Matrix Printer ○ Laser Printer ○ Flat Bed Scanner ○ Digitizer ○ Hand Scanner

PaperImage, Inc. 1994-1995 Copyright All rights reserved. 408.477.0303 Fax * paperimage@aol.com * Fax Demo 1-800-421-7007 *

Please do NOT use a cover sheet. Only legible and completed forms can be processed. You may make copies of this form for multiple requests needed. FAX FORMS to (800) 496-8008

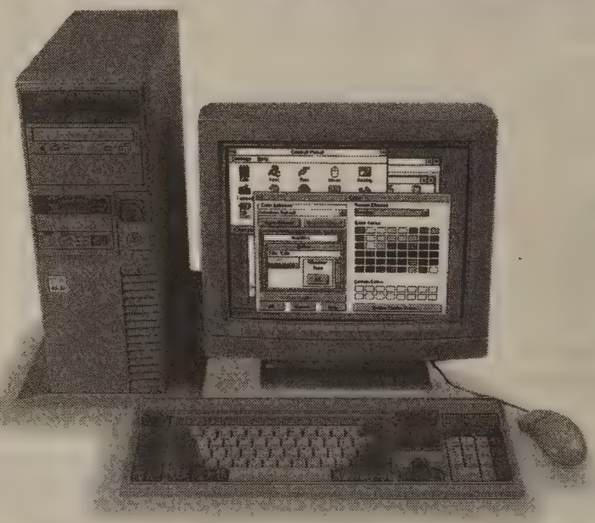
PaperImage ©1994

Please Cut Out Form On Dotted Line...Do Not Enlarge or Reduce Size of Form

Please Cut Out Form On Dotted Line...Do Not Enlarge or Reduce Size of Form

Victoria™ Series

INTEL "ZAPPA" MOTHERBOARD TRITON CHIPSET WITH EDO MEMORY NOW AVAILABLE



WINDOWS NT ADVANCED SERVER
WINDOWS FOR WORKGROUPS
OS/2
VISUAL
WINDOWS NT

NAVY
Student's Dream

- Intel Pentium Processor
- Asus Pentium PCI Motherboard
- 256K External Cache
- 8MB 72-pin RAM (Max 128MB)
- Diamond Stealth 64 PCI Video Card w/2MB DRAM
- 15" Digital Flat Screen NI Monitor, .28
- 1.44MB Floppy Drive
- 420MB IDE HDD
- PCI Enhanced IDE Controller
- 2-16550 High Speed Serial Ports
- 1 Parallel Port
- Mid Tower Case w/250W Power Supply
- 101-key Enhanced Keyboard
- Microsoft Serial Mouse
- Free Mouse Pad
- Microsoft DOS 6.22 & Windows 3.11

✤ Or OS/2 Warp

60MHz	$1695
66MHz	$1745
75MHz	$1795
90MHz	$1895
100MHz	$2045

Lease for as low as **$71** *P/M*

BLACK
★ System of The Month ★

- Intel Pentium Processor
- Asus Pentium PCI Motherboard
- 256K External Cache
- 8MB 72-pin RAM (Max 128MB)
- Diamond Stealth 64 PCI Video Card w/1MB DRAM
- 15" Digital Flat Screen NI Monitor, .28
- 1.44MB FDD
- 420MB IDE HDD
- PCI Enhanced IDE Controller
- 2-16550 High Speed Serial Ports
- 1 Parallel Port
- Mini Tower Case w/ 250W Power Supply
- 101-key Enhanced Keyboard
- 3 Button Serial Mouse
- Free Mouse Pad
- Microsoft DOS 6.22 & Windows 3.11

✤ Or OS/2 Warp

Impression Double Speed Multimedia Kit

- Double Speed Internal CD ROM
- 16 Bit Sound Card + Speakers
- Microsoft Encarta 95
- Microsoft Works
- Microsoft Money
- Microsoft Entertainment Pack

60MHz	$1895
66MHz	$1945
75MHz	$1995
90MHz	$2095
100MHz	$2245

Lease for as low as **$79** *P/M*

RED
At Home

- Intel Pentium Processor
- Asus Pentium PCI Motherboard
- 256K External Cache
- 8MB 72-pin RAM (Max 128MB)
- Diamond Stealth 64 PCI Video Card w/1MB DRAM
- 17" Digital Flat Screen NI Monitor, .42
- Double Speed Internal CD ROM
- 16 Bit Sound Card + Speakers
- 1.44MB Floppy Drive
- 420MB IDE HDD
- PCI Enhanced IDE Controller
- 2-16550 High Speed Serial Ports
- 1 Parallel Port
- Mini Tower Case w/250W Power Supply
- 101-key Enhanced Keyboard
- Microsoft Serial Mouse
- Free Mouse Pad
- Microsoft DOS 6.22 & Windows 3.11

✤ Or OS/2 Warp

- Microsoft Money
- Microcosm
- Darkseed
- Dark Sun
- SIMM City 2000

60MHz	$1995
66MHz	$2045
75MHz	$2095
90MHz	$2195
100MHz	$2345

Lease for as low as **$83** *P/M*

MAGENTA
Lifestyle

- *Intel Zappa Motherboard Trition chipset*
- *Intel Pentium Processor*
- *8 Mb EDO RAM Exp to 128 MB*
- *Diamond Stealth 64 PCI w/2 MB DRAM*
- *15" Non-Int Flat Screen Monitor*
- 1.44 Mb 3 1/2" Floppy Disk Drive
- 540 MB Hard Disk drive SCSI
- Adaptec 2940 SCSI Controller
- 2-16550 High Speed Serial & One Parallel
- Mid Size Tower Case w/250 Watt PS
- 101K Keytronics Keyboard
- MS Serial Mouse, Mouse Pad
- Microsoft DOS 6.22 & Microsoft Windows 3.11
- OS/2 Warp

75MHz	$2300
90MHz	$2400
100MHz	$2590
120MHz	$2950

Lease for as long as **$98** P/M

SUNNYVALE
Tel: (408)720-0493/Fax: (408)720-1967
1196 Kern Ave., Sunnyvale, CA 94086

SAN FRANCISCO
Tel: (415) 434-8118/Fax: (415) 434-8128
500Washington St., San Francisco, CA 94111

EL CERRITO
Tel: (510)528-0753/Fax: (510) 528-0757
10005 San Pablo Ave., El Cerrito, CA 94530

SACRAMENTO
Tel: (916) 483-4278/Fax: (916) 483-4826
2530 Watt Ave., Sacramento, CA 95821

FRESNO
Tel: (209) 446-0809/Fax: (209) 446-0819
6481 North Blackstone Ave., Fresno, CA 93710

HD COMPUTER
VICTORIA SERIES

Victoria™ Series

COMPUTER SHOPPER

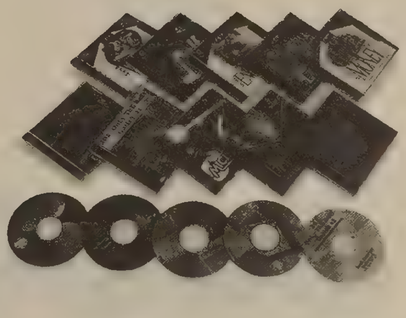
BYTE

intel inside

PENTIUM™ 90/100 MHz ! "TOP CHOICE"

For the information superhighway!

Fast processing is key to avoiding gridlock on the information superhighway!



PURPLE
Home/Office Best Buy System

- **Intel Pentium Processor**
- **Asus Pentium PCI Motherboard**
- **256K External Cache**
- **8MB 72-pin RAM (Max 128MB)**
- **Diamond Stealth 64 PCI Video Card w/1MB DRAM**
- **15" Digital Flat Screen NI Monitor**
- **Creatix 14.4 KB Internal Fax Modem**
- **Microsoft Office Professional 4.3**
- **Teac Quad Internal CD-ROM**
- **Sound Blaster 16 Sound Card**
- 1.44MB Floppy Drive
- 420MB IDE HDD
- PCI Enhanced IDE Controller
- 2-16550 High Speed Serial Ports
- 1 Parallel Port
- Mid Tower Case w/250W Power Supply
- 101-key Keytronic Keyboard
- Microsoft Serial Mouse
- Microsoft Bookshelf
- Free Mouse Pad
- Microsoft DOS 6.22 & Windows 3.11

✣ Or OS/2 WarP

60MHz	*$2295*
66MHz	*$2345*
75MHz	*$2395*
90MHz	*$2495*
100MHz	*$2645*

Lease for as low as ***$96 P/M***

SILVER
Dream Machine

- **Intel Pentium Processor**
- **Asus Pentium PCI Motherboard**
- **256KB External Cache**
- **8MB 72-pin RAM (Max 128MB)**
- **Diamond Stealth 64 PCI Video Card w/2MB DRAM**
- **15" Digital Flat Screen NI Monitor, .28**
- 1.44MB FDD
- 540MB IDE HDD
- PCI Enhanced IDE Controller
- 2-16550 High Speed Serial Ports
- 1 Parallel Port
- Mid Tower Case w/250W Power Supply
- 101-key Keytronic Keyboard
- Microsoft Serial Mouse
- Microphone & Headphones
- Free Mouse Pad
- Microsoft DOS 6.22 & Windows 3.11

✣ Or OS/2 Warp

Diamond Multimedia 5000 Kit

- Quad Speed Internal CD-ROM
- 16 Bit Sound Card + Stereo Speakers
- MYST, Rebel Assault, Doom, Raptor Simm City 2000, + 27 More Titles

60MHz	*$2195*
66MHz	*$2245*
75MHz	*$2295*
90MHz	*$2395*
100MHz	*$2545*

Lease for as low as ***$92 P/M***

GRAY
Office System

- **Intel Pentium Processor**
- **Asus Pentium PCI Motherboard**
- **256K External Cache**
- **8MB 72-pin RAM (Max 128MB)**
- **Diamond Stealth 64 PCI Video Card w/2MB DRAM**
- **15" Digital Flat Screen NI Monitor, .28**
- **Microsoft Office Professional 4.3**
- **Double Speed Internal CD-ROM**
- **Sound Blaster 16 Sound Card**
- 1.44MB FDD
- 540MB SCSI II HDD
- NCR PCI SCSI II Controller
- 2-16550 High Speed Serial Ports
- 1 Parallel Port
- Mid Tower Case w/250W Power Supply
- 101-key Keytronic Keyboard
- Microsoft Serial Mouse
- Free Mouse Pad
- Microsoft DOS 6.22 & Windows 3.11

✣ Or OS/2 Warp

60MHz	*$2345*
66MHz	*$2395*
75MHz	*$2445*
90MHz	*$2545*
100MHz	*$2695*

Lease for as low as ***$98 P/M***

BLUE
Family PC System

- **Intel Pentium Processor**
- **Asus Pentium PCI Motherboard**
- **256K External Cache**
- **8MB 72-pin RAM (Max 128MB)**
- **1GB Enhanced IDE HDD**
- **Diamond Stealth 64 PCI Video Card w/2MB DRAM**
- **15" Digital Flat Screen NI Monitor**
- **Creatix 14.4 KB Internal Fax Modem**
- 1.44MB FDD
- PCI Enhanced IDE Controller
- 2-16550 High Speed Serial Ports
- 1 Parallel Port
- Mid Tower Case w/ 250W Power Supply
- 101-key Enhanced Keyboard
- Microsoft Serial Mouse
- Free Mouse Pad
- Microsoft DOS 6.22 & Windows 3.11

✣ Or OS/2 Warp

Impression 4X Multimedia Kit

- Quad Speed Internal CD-ROM
- 16 Bit Sound Card + Stereo Speakers
- Microsoft Encarta 95
- Microsoft Works
- Microsoft Money
- Microsoft Entertainment Pack

60MHz	*$2295*
66MHz	*$2345*
75MHz	*$2395*
90MHz	*$2495*
100MHz	*$2645*

Lease for as low as ***$96 P/M***

EMAIL SALES ADDRESS
hd@hdcomputer.com

SALES HOURS:
9:00AM - 6:00PM WEEKDAYS,
10AM - 6PM SATURDAYS (PACIFIC TIME)

SUNNYVALE
Tel: (408)720-0493/FAX: (408)720-1967
1196 KERN AVE., SUNNYVALE, CA 94086

SAN FRANCISCO
Tel: (415) 434-8118/FAX: (415) 434-8128
500WASHINGTON ST., SAN FRANCISCO, CA 94111

EL CERRITO
Tel: (510)528-0753/FAX: (510) 528-0757
10005 SAN PABLO AVE., EL CERRITO, CA 94530

SACRAMENTO
Tel: (916) 483-4278/FAX: (916) 483-4826
2530 WATT AVE., SACRAMENTO, CA 95821

FRESNO
Tel: (209) 446-0809/FAX: (209) 446-0819
6481 NORTH BLACKSTONE AVE., FRESNO, CA 93710

TERMS AND CONDITIONS: • 30 DAYS RETURN POLICY • 1 YEAR PARTS + LABOR WARRANTY • MAJOR CREDIT CARDS ACCEPTED • NO SURCHARGE FOR VISA, MC, AE AND DISCOVER CARDS • QUALITY PO'S ACCEPTED FROM ACADEMIC, CORPORATE AND PUBLIC INSTITUTIONS • APO'S WELCOME • SHIPPING CHARGE NOT REFUNDABLE • RETURN SHIPMENTS MUST BE INSURED, PRE-PAID AND BEAR AN RMA# ON THE SHIPPING LABEL • PRICE DOES NOT INCLUDE SHIPPING • PRICE ARE SUBJECT TO CHANGE WITHOUT NOTICE • COMPONENT WARRANTIES OFFERS AND CLAIMS ARE HANDLED BY THE MANUFACTURER • COMPONENTS COMPATIBILITY IS NOT GUARANTEED • NO RETURN ON USED ITEMS • ALL OPEN RETURNS ARE SUBJECT TO 15% RESTOCKING FEE • NO EXCHANGES OR REFUNDS ON CD'S WILL BE REPLACED WITH THE SAME ITEM ONLY.. • ALLOW 14 DAYS TO PROCESS REFUND. • NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS. • PRICES GOOD THRU MAY 31, 1995.

HD COMPUTER
VICTORIA SERIES

Victoria™ *Series*

THE ULTIMATE IN SPEED AND POWER...INTEL ZAPPA MOTHERBOARD, TRITON CHIPSET AND PENTIUM 120MHz!!!

GREEN
Top of The Line System

- Intel Pentium Processor
- Intel "Zappa" Motherboard
- Triton Chipset
- 8 MB EDO Memory
- Diamond Stealth 64 PCI Pro Video Card w/2MB VRAM
- Sony 17sf 17" Flat Screen Monitor .25dp
- US Rototics 14.4 Fax Modem
- Microsoft Natural Keyboard
- Microsoft Office Professional 4.3
- Teac Quad Speed Internal CD ROM
- Sound Blaster 16 Sound Card
- Teac 1.44 MB Floppy Drive
- 730 MB Enhanced IDE HDD
- PCI Enhanced IDE Contorller
- 2-16550 High Speed Serial Ports
- 1 Parallel Port
- Mid Tower Case w/250W Power Supply
- Microsoft Serial Mouse
- Microsoft Bookshelf
- Free Mosue Pad
- Microsoft DOS 6.22 & Windows 3.11

✤ Or OS/2 Warp

75MHz	*$3495*
90MHz	*$3595*
100MHz	*$3795*
120MHz	*$4245*

Lease for as low as *$139* *P/M*

GOLD
Workstation

- Intel Pentium Processor
- Intel "Zappa" Motherboard
- Triton Chipset
- 8 MB EDO Memory
- 1GB SCSI-II HDD
- Adaptec 2940 PCI SCSI-II Controller
- ATI Graphics Pro Turbo PCI Video card w/2 MB VRAM
- Epson 17 Digital Flat Screen Monitor .28DP
- Microsoft Natural Keyboard
- Microsoft Office Professional 4.3
- Quad Speed Internal CD ROM
- Sound Blaster 16 Sound Card
- 1.44 MB Floppy Drive
- 2-16550 High Speed Serial Ports
- 1 Parallel Port
- Mid Tower Case w/250W Power Supply
- Microsoft Serial Mouse
- Microsoft Bookshelf
- Free Mosue Pad
- Microsoft DOS 6.22 & Windows 3.11

✤ Or OS/2 Warp

75MHz	*$3595*
90MHz	*$3695*
100MHz	*$3895*
120MHz	*$4345*

Lease for as low as *$141* *P/M*

WHITE
Powerstation

- Intel Pentium Processor
- Asus Pentium PCI Motherboard
- 256K External Cache
- 16MB 72-pin RAM (Max 128MB)
- 1 GB SCSI HDD
- ATI Graphics Pro Turbo PCI Video Card w/2MB VRAM
- 17" Digital Epson NI Flat Screen Monitor, .28
- Microsoft Natural Keyboard
- Microsoft Office Professional 4.3
- Toshiba Quad Speed Internal CD-ROM
- Sound Blaster 16 Sound Card
- 1.44MB FDD
- PCI Enhanced IDE Controller
- NCR PCI SCSI II Controller
- 2-16550 High Speed Serial Ports
- 1 Parallel Port
- Mid Tower Case w/250W Power Supply
- Microsoft Serial Mouse
- Free Mouse Pad
- Microsoft DOS 6.22 & Windows 3.11

✤ Or OS/2 Warp

60MHz	*$3295*
66MHz	*$3345*
75MHz	*$3395*
90MHz	*$3495*
100MHz	*$3645*

Lease for as long as *$130* *P/M*

ORANGE
CAD Station System

- Intel Pentium Processor
- Asus Pentium PCI Motherboard
- 256K External Cache
- 16MB 72-pin RAM (Max 128MB)
- 2GB SCSI-II HDD
- Diamond Stealth 64 PCI Pro Video Card w/2MB VRAM
- Nokia 447x17" 1600x1280 Monitor .25
- US Robotics 14.4 KB Internal Fax Modem
- Adaptec 2940 PCI SCSI Controller
- Microsoft Natural Keyboard
- Toshiba Quad Speed Internal SCSI CD-ROM
- 1.44MB Floppy Drive
- 2-16550 High Speed Serial Ports
- 1 Parallel Port
- Mid Tower Case w/250W Power Supply
- Microsoft Serial Mouse
- Free Mouse Pad
- Microsoft DOS 6.22 & Windows 3.11

✤ Or OS/2 Warp

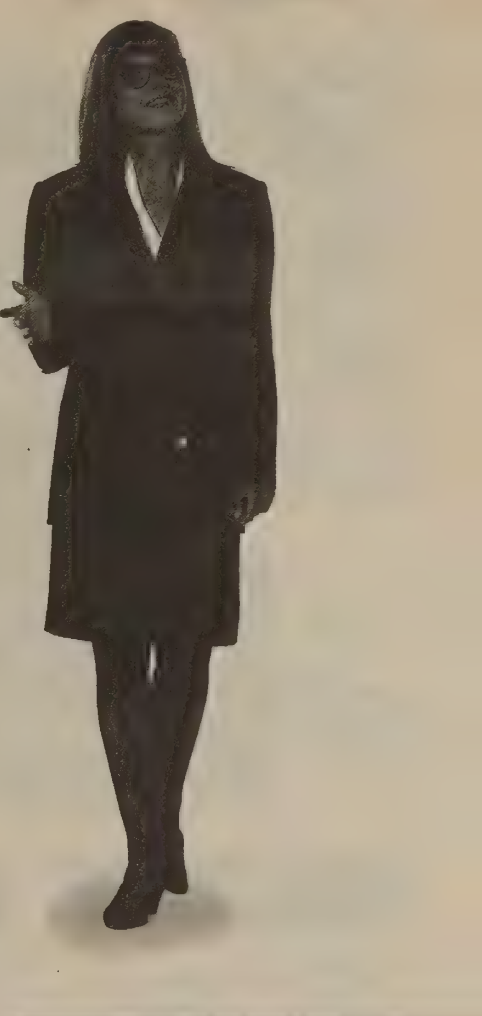
60MHz	*$4495*
66MHz	*$4545*
75MHz	*$4595*
90MHz	*$4695*
100MHz	*$4845*

Lease for as low as *$177* *P/M*

Victoria™ Series

486PCI/VESA LOCAL BUS

VISUAL C++
WINDOWS NT
WINDOWS NT ADVANCED SERVER
WINDOWS FOR WORKGROUPS
OS/2



VIOLET
VESA Local Bus Best Buy

- **Intel 486 Processor**
- **Asus 486 VLB Motherboard**
- **128KB Cache**
- **4MB RAM**
- **15" Non-Interlaced Monitor, .28 dpi**
- 1.44MB FDD
- 424MB IDE HDD
- VLB 2H/2F IDE Controller
- 2S, 1P, 1G Ports
- 32-bit VL-B Graphic Accelerator Card/1MB
- Mini Tower Case w/ 250W Power Supply
- 101-key Enhanced Keyboard
- 3 Button Serial Mouse
- Free Mouse Pad
- Microsoft DOS 6.22 & Windows 3.11
- ✤ Or OS/2 Warp

Microsoft Upgrade Kit
- Double Speed CD-ROM Drive
- Sound Blaster 16 Bit Sound Card
- Amplified Stereo Speaker
- Microsoft Encarta 95
- Microsoft Golf
- Microsoft Baseball
- Microsoft Works
- Microsoft Money
- Microsoft Entertainment Pack (Danger Creative, Simm City 2000, Scene)

DX2-66 ***$1475***
DX4-100 ***$1595***

Lease for as low as ***$62 P/M***

CYAN
Challenger

- **Intel 486DX Processor**
- **Asus 486 PCI/VLB Motherboard**
- **ZIF Socket for Upgrade to Pentium Overdrive**
- **256 KB External Cache**
- **8 MB 72 Pin RAM (128 MB Max)**
- **Diamond Stealth 64 PCI Video Card w/1 MB**
- **15" Digital Non-Interlaced Monitor .28dpi**
- 1.44 MB FDD
- 420 MB SCSI HDD
- Built-In PCI IDE Controller
- 2-16550 High Speed Serial Ports
- 1 Parallel Port
- Mini Tower Case w/250W Power Supply
- 101 Key Keytronic Keyboard
- 3-Button Serial Mouse
- Microsoft DOS 6.22 & Windows 3.11
- ✤ Or OS/2 Warp

Creative Labs Edutainment Kit
- Double Speed Internal CD ROM Drive
- Sound Blaster 16 Sound Card
- Stereo Speakers & Microphone
- Quicken, Rebel Assault, Wing Commander, Links + 38 More Titles

DX2-66 ***$1845***
DX4-100 ***$1945***

Lease for as low as ***$77 P/M***

IVORY
Achiever

- **Intel 486DX Processor**
- **Asus 486 PCI/VLB Motherboard**
- **ZIF Socket for Upgrade to Pentium Overdrive**
- **256 KB External Cache**
- **8 MB 72 Pin RAM (128 MB Max)**
- **Diamond Stealth 64 PCI Video Card w/1 MB**
- **15" Digital Non-Interlaced Monitor .28dpi**
- 1.44 MB FDD
- 540 MB SCSI HDD
- NCR PCI SCSI Controller
- 2-16550 High Speed Serial Ports
- 1 Parallel Port
- Mid Tower Case w/250W Power Supply
- 101 Key Keytronic Keyboard
- Microsoft Serial Mouse
- Microsoft DOS 6.22 & Windows 3.11
- ✤ Or OS/2 Warp

Diamond Multimedia 1000 Kit
- Double Speed Internal CD ROM Drive
- 16 bit Sound Card
- Microphone & Headphones
- Myst, Rebel assault, Doom Raptor, SIMM City 2000 + 27 More Titles

DX2-66 ***$1895***
DX4-100 ***$1995***

Lease for as low as ***$79 P/M***

BROWN
486 PCI Office System

- **Intel 486DX Processor**
- **Asus 486 PCI/VLB Motherboard**
- **ZIF Socket for Upgrade to Pentium Overdrive**
- **256KB External Cache**
- **8MB 72-pin RAM (Max 128MB)**
- **Diamond Stealth 64 PCI Video Card w/1MB**
- **15" Digital Flat Screen Monitor, .28dpi**
- **Microsoft Natural Keyboard**
- **Microsoft Professional 4.3**
- **Quad Speed Internal CD-ROM Drive**
- **Sound Blaster 16 Sound Card**
- 1.44MB FDD
- 540 SCSI Hard Drive
- NCR PCI SCSI Controller
- 2-16550 High Speed Serial Ports
- 1 Parallel Port
- Mid Tower Case w/250W Power Supply
- Microsoft Serial Mouse
- Free Mouse Pad
- Microsoft DOS 6.22 & Windows 3.11
- ✤ Or OS/2 Warp

DX2-66 ***$2195***
DX4-100 ***$2295***

Lease for as low as ***$92 P/M***

EMAIL SALES ADDRESS
hd@hdcomputer.com

SALES HOURS:
9:00AM - 6:00PM WEEKDAYS,
10AM - 6PM SATURDAYS (PACIFIC TIME)

SUNNYVALE
Tel: (408)720-0493/FAX: (408)720-1967
1196 KERN AVE., SUNNYVALE, CA 94086

SAN FRANCISCO
Tel: (415) 434-8118/FAX: (415) 434-8128
500WASHINGTON ST., SAN FRANCISCO, CA 94111

EL CERRITO
Tel: (510)528-0753/FAX: (510) 528-0757
10005 SAN PABLO AVE., EL CERRITO, CA 94530

SACRAMENTO
Tel: (916) 483-4278/FAX: (916) 483-4826
2530 WATT AVE., SACRAMENTO, CA 95821

FRESNO
Tel: (209) 446-0809/FAX: (209) 446-0819
6481 NORTH BLACKSTONE AVE., FRESNO, CA 93710

TERMS AND CONDITIONS: • 30 DAYS RETURN POLICY • 1 YEAR PARTS + LABOR WARRANTY • MAJOR CREDIT CARDS ACCEPTED • NO SURCHARGE FOR VISA, MC, AE AND DISCOVER CARDS • QUALITY PO'S ACCEPTED FROM ACADEMIC, CORPORATE AND PUBLIC INSTITUTIONS • APO'S WELCOME • SHIPPING CHARGE NOT REFUNDABLE • RETURN SHIPMENTS MUST BE INSURED, PRE-PAID AND BEAR AN RMA# ON THE SHIPPING LABEL • PRICE DOES NOT INCLUDE SHIPPING • PRICE ARE SUBJECT TO CHANGE WITHOUT NOTICE • COMPONENT WARRANTIES OFFERS AND CLAIMS ARE HANDLED BY THE MANUFACTURER • COMPONENTS COMPATIBILITY IS NOT GUARANTEED • NO RETURN ON USED ITEMS • ALL OPEN RETURNS ARE SUBJECT TO 15% RESTOCKING FEE • NO EXCHANGES OR REFUNDS ON CD'S WILL BE REPLACED WITH THE SAME ITEM ONLY... • ALLOW 14 DAYS TO PROCESS REFUND. • NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS. • PRICES GOOD THRU MAY 31, 1995.

HD COMPUTER
VICTORIA SERIES

Victoria™ Series

MULTIMEDIA

9 CD-ROM Package Options for You to Convert Your Computer Into The Multimedia World!!

Creative Lab

Discovery CD
- Entry Level Multimedia Upgrade Kit.
- Sound Blaster card, new dual speed drive Photo-CD compatible
- Lemmings, Animals!, Software Toolworks' Encyclopedia Sound Blaster CT-38 Shielded Stereo Speakers.

$245

Sound Blaster Discovery CD "New Edition"
- 2X Internal CD ROM Drive
- Sound Blaster 16 Sound Card
- Stereo Speakers
- Grolier Encyclopedia
- Wing Commander II
- Digital Morph
- Plus 15 More Tiltes

$299

Game Blaster CD 16
- Game Blaster 16
- Double Speed CD-ROM Drive
- High Performance Joystick & Speakers
- Top Games Bundled CD-ROM Titles

$369

Sound Blaster Value CD
- 2X Internal CD ROM Drive
- Sound Blaster 16 Sound Card
- Stereo Speakers
- Grolier Encyclopedia
- Aldus Gallery Effects
- Creative Mosaic
- Plus 9 More Tiltes

$265

Digital School House
- Sound Blaster 16-16-Bit Stereo Sound Card
- Double Speed, Multi-Session CD-ROM Drive
- Stereo Speakers for Accurate Sound Reproduction
- 20 High-Quality Multimedia and Educational Titles

$279

Microsoft Upgrade Kit

- Double Speed CD-ROM Drive
- Sound Blaster 16 Sound Card
- Amplified Stereo Speaker
- Microsoft Encarta Encyclopedia
- Microsoft Golf
- Microsoft Works
- Microsoft Money
- Microsoft Entertainment Pack
- Danger Creative
- Sim City 2000
- Scene

$299

Diamond Multimedia Kit

- Kit 5000 w/Quad-Speed CD-ROM
- 16-Bit, CD Quality Sound Card, Wave Table Upgradable
- 30 + Best Selling Titles
- Premium Stereo Speaker, Headphone & Microphone
- Quick Start Video for Easy Installation
- Works with all Sound Blaster Compatible Games

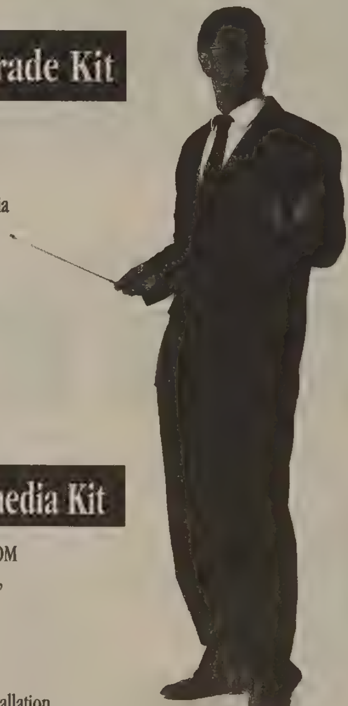
$489

- Kit 4000 w/Quad-Speed CD-ROM
- 16-Bit, CD Quality Sound Card, Wave Table Upgradable
- 11 Best Selling Titles
- Premium Stereo Speaker, Headphone & Microphone
- Quick Start Video for Easy Installation
- Works with all Sound Blaster Compatible Games

$419

- Kit 1000 w/Double-Speed CD-ROM
- 16-Bit, CD Quality Sound Card, Wave Table Upgradable
- 30 + Best Selling Titles
- Premium Stereo Speaker, Headphone & Microphone
- Quick Start Video for Easy Installation
- Works with all Sound Blaster Compatible Games

$345



Media Magic

- Media Magic 2X Kit
- Double Speed CD ROM Drive
- Media Magic 16 Bit Sound Card
- Stereo Speakers
- Compton's Encyclopedia '95
- Chessmaster 3000
- Mavis Beacon Teaches Typing
- US Atlas
- World Atlas

$199

- Media Magic 4X Kit
- Quad Speed CD ROM Drive
- Media Magic 16 Bit Sound Card
- Stereo Speakers
- Compton's Encyclopedia '95
- Chessmaster 3000
- Mavis Beacon Teaches Typing
- US Atlas
- World Atlas

$295

Impression

- Impression 2X Upgrade Kit
- Double Speed CD ROM Drive
- Sound Blaster 16 Sound Card
- MS Encarta '95
- MS Works
- MS Money
- MS Entertainment Pack

$259

- Impression 4X SCSI Upgrade Kit
- Toshiba 3501 SCSI CD ROM Drive
- Sound Blaster SCSI Sound Card
- MS Encarta '95
- MS Works
- MS Money
- MS Entertainment Pack

$499

CD-ROM Drives

NEC	
NEC 3xp Plus	*$399*
CDR 500 3xi External	*$429*
NEC 4X Internal	*$399*

TOSHIBA SCSI II/IDE	
4X 3601B Internal	*$299*
4X 3601B External	*$409*
4X IDE Internal	*$210*
PLEXTOR	
4X Internal SCSI II PX-43CH	*$Call*
DM External 5028 w/caddy	*$Call*
CHINON	
Double Speed SCSI II Internal	
CDS-535 Internal	*$229*
CDXX-535 External	*$339*
TEAC	
4X Internal CD-ROM	*$195*
4X Combo w/Floppy	*$335*
PANASONIC/CR562CD ROM	
Includes Controller	
320ms/300KB/sec	
64K Cache	
Double Speed	*$129*
SONY 55E/New Multi Speed 300KB/Sec	
Controller Card	
Cables and Software	*$115*
MITSUMI DOUBLE SPEED CD-ROM	*$135*
MITSUMI QUAD SPEED CD-ROM	*$199*

Speakers

• 80W Stereo Speaker	*$69*
• 50W Stereo Speaker	*$39*
• 25W Speaker	*$35*
• 10W Speaker	*$23*
• MLI-CP55 Speaker	*$12*

Sound Card

Creative Labs	
Sound Blaster 16 Basic	*$99*
Sound Blaster 16 SCSI 2/with ASP	*$169/191*
Sound Blaster 16 MultiCD/with ASP	*$129/165*
Wave Blaster	*$169*
AWE 32	*$269*
Video Blaster RT200	*$299*
Video Blaster RT300	*$339*

The Best Collection of CD Titles!

THE FAMILY DOCTOR 3RD EDITION
MYST
RISE
Magic Carpet
Great Moments

101 Only The Best Games 1	$12
101 Only The Best Games 2	$13
1830: Railroads and Robbers	$60
20th Century Almanac	$9
3 ft. 6 Pak	$20
5 ft. 10 Pak Vol.I	$30
5 ft. 10 Pak Vol.II	$31
5 Ft. 10 Pak Vol III	$40
7th Guest	$19
7th Guest Guide Book	$16
Aces Critical Mission	$15
Aces of The Pacific	$19
Aces Over Europe	$50
Aegis: Guardian of the Fleet	$25
Aesop's Fables: Kids Can Read	$25
A.D.A.M. the Inside Story	$69
AD & D 3 Pak	$32
Aladdin Activity Center (w/Mouse Pad)	$28
Alien Logic	$19
Alone In The Dark	$30
Alone In the Dark III	$50
Amanda's Stories	$22
America Alive 2.0	$19
American Heritage Talking Dictionary	$16
Annabel's Dream: Ancient Egypt	$59
Animals (San Diego Zoo Presents)	$10
Animals Encyclopedia	$18
Animation Tour	$17
Arthur's Teacher Trouble	$15
Aisa Alive! 2.0	$19
Audobon Birds	$14
Audobon Mammals	$14
Auto Almanac 95	$11
Auto Registry 94	$19
Barney Bear Does To Space	$19
Battle Chess Enhanced(Star Wars)	$19
Beauty and Beast	$10
Betrayal at Krondor	$20
Betty Boop Cartoons	$9
Blown Away	$36
Bible By King James	$22
Bible And Religion	$12
Big Green Disc	$20
Bio Forge	$60
Blown Away	$36
Bugs Bunny Cartoons	$9
Card Shop Plus	$16
Carmen San Diego(Where In The World)	$19
Casino and Card Games	$10
Castles II: Siege And Conquest	$55
CD Blaster	$10
Challenge Pak	$16.5
Charlie Chaplin Film Festival	$14
Chessmaster 4000 Turbo	$16
Children's Melodies(Creative Labs)	$19
Chinese Acupuncture	$45
Cica Window Explosion	$11
Circle Of Knowledge Encyclopedia	$16
Commanche	$52
Commander Blood	$29
Compton's Multimedia Encyclopedia'95	$28
Compuserve Value Pak	$28
Cook Book Heaven 2	$13
Corel Photo CD-Birds	$19
Corel Photo CD-Birdge	$19
Corel Photo CD -Butterflies	$19
Corel Photo CD-Deserts	$19
Corel Photo CD-Fields	$19
Corel Photo CD-Foods	$19
Corel Photo CD-People	$19
Corel Photo CD-Predators	$19
Corel Photo CD-Insects	$19
Corel Photo CD-Native American Ruins	$19
Corel Photo CD-North American Wildlife	$19
Corel Photo CD-Sunrise and Sunsets	$19
Corel Photo CD-Underwater Reefs	$19
Corel Photo CD-Residential Interiors Desighs	$19
Corridor 7	$19
Create Your Own Game	$30
Creature Shock	$52
Cyberia	$65
Cyberplasm Formula	$14
Critical Path	$17
Cyber Race	$15
Cyclones	$19
Dagger of Amon Ra	$23
Dark Legions	$19
Dark Seed	$20
Dark Sun I: Shattered Lands	$19
Dark Sun II: Wake of The Ravager	$19
Day of the Tentacle	$35
Desert Storm MPC	$12
Desert Strike	$30
Dictionary of The Living World	$25
Dinosaurs Safari	$18
Discworld	$60
Dominus	$32
Doom And Accessories IV	$15
Doom Heaven II	$14
Doom II	$55
Doom II Mania	$14
Doom Mania	$13
Dracula Unleashed	$25
Dragon Lair	$25
Dr. Fun Pak	$9
Dr. Games	$9
Dr. Graphic	$9
Dr. Music	$9
Dr. Shareware	$9
Dr. T's Sing-A -Long	$17
Dr. Math	$17
Dune	$15
Europe Alive! 2.0	$18
F-117A Stealth Fighter	$18
F-15 Strike EAGLE III	$16
Family Choice	$17
Family Doctor 3rd ED	$17
Family Fun and Learning Pak	$24
Fate of The Starlords	$9
First Emperor of China	$16
Flight Commander II	$42
Fonts Expert	$11
Front Page Pro Football	$52
Futura	$16
First Wave Game Pak	$25
Folk Favorites(Creative Labs)	$19
Gabriel Knights	$19
Games Platinum	$16
Great Naval Battles II	$19
Groiler's Encyclopedia '95	$19
Groiler's Prehistoria	$16
Gunship 2000	$19
Gus Goes To Cybertown	$12
Guy Spy	$16
Ham Radio 3.0	$12
Harry And the Haunted House	$40
Harry's Story Disc	$17
Heretic	$10
High Seas Trader	$75
HIV Resource Guide	$9
Hugo's House of Horror's	$9
Hobbs OS/2 Archived	$16
Hobb's OS/2 Ready Pak	$15
Home Medical Advisor Pro 4.0	$55
Home Remedies	$20
I Can Spell	$9
Inca I	$16
Inca II	$20
Indiana Jones Fate of Atlantis	$19
Indy Carracing	$25
Infopedia	$19
Interactive Storytime II	$12
Interactive Storytime III	$12
Iron Assault	$17
Iron Helix	$22
Jack Nicholaus Tour Collection	$28
Jagged Alliance	$55
Journeyman Project turbo	$22
Juke Box	$19
Jurassic Park Screen Saver	$20
Just Grandma and Me	$17
Kid's Farm	$9
King's Quest V	$15
King's Quest VI	$16
King's Quest VII	$69
Kodak Photo Access CD	$11
Lawnmower Man	$17
Legend Of Kyrandia	$30
Legend Of Kyrandia III	$42
Links Collector's CD	$16
Links of Solid Gold	$20
Linux: 4 CD Set	$2
Lion King Animated Storybook (w/Mouse Pad)	$30
Living Book Sampler(Broderbund)	$11
Lode Runner: The Legend Returns	$44
Loom: Book of Patterns	$12
Lord of the Rings	$21
Lunicus	$19
Mad Dog Maccree II: Lost Gold	$16
Magic Carpet	$49
Magic Death Virtual Murder I	$13
Magician's Secret Cards	$16
Mario is Missing/Word Atlas	$15
Math Blaster Episode I	$36
Math Blaster Episode II	$38
Mavis Beacon Teaches Typing 3.0	$15
Mavis Beacon Teaches Typing For Kids	$15
Mayo Clinic Family Health Book	$15
Mayo Clinic Family Pharmacist	$19
Mayo Clinic: Sports, Healthe And Fitness	$19
Mayo Clinic: The Total Heart	$19
Mega Race	$17
Menzobeeranzan	$20
Metaltech Earth Siege	$50
Microcosm	$17
MS Art Gallery	$55
MS Beethoven's 9th symphony	$55
MS Bookshlef '94	$34
MS Dinosaurs	$49
MS Encarta '95	$45
MS Magic School Bus: The Human Body	$48
MS Magic School Bus: The Solar System	$48
MS Works	$36
Myst	$45
Myst Guidebook	$16
National Geographic Mammals	$22
National Parks of America	$17
New Kids Edutainment I	$12
New Kids Edutainment II	$12
Newsweek I (Unfinished Bus./Mending Earth)	$15
New Kid On The Block	$40
Newsweek II (Behind The Screens)	$15
Night Owl XV	$20
Nomad	$30
Oceans Below	$15
Outpost	$24
Panzer General	$19
Parenting: Prenatal to Preschool	$17
PC Library	$15
People Magazine: 20 Amazing Years	$24
Peter Gabriel: Explora	$60
Planetary Taxi	$34
Playing with Language English	$17
Playing with Language French	$17
Playing with Language German	$17
Playing with Language Japanese	$17
Playing with Language Spanish	$17
Populous II/Powermonger	$20
Power Rangers	$15
Presidents	$59
Prince Interactive	$55
Psychotron	$25
Puzzle Puzzle	$17
Quantum Gate I	$17
Quantum Gate II: Vortex	$42
Rainbow Children Park	$14
Random House Kids Encyclopedia	$55
Raven Loft	$19
Real World Math	$20
Rebel Assault (Star Wars)	$25
Reference Library	$15
Renaissance Master I	$27
Renaissance Master II	$25
Retribution	$65
Return to Zork	$18
Rise of The Robots	$22
Rise of The Triad	$45
Scary Poems/Rotten Kids(Kids Can Read)	$13
Secret Weapons of Luftwaffe	$14
Shanghai: greatest Moments	$50
Shareware Heven II	$15
Shark Alert	$19
Sherlock Holmes: Last Files	$20
Sim City 2000	$22
Smart Photo CD	$12
So Much Shareware IV	$16
Somebody Catch My Homework	$19
Sport's Illustrated '94	$20
Star Control Collection	$28
Star Trek 25th Anniversary	$19
Star Trek Training Manual	$42
Stickybear Preschool	$30
Street Atlas USA 2.0	$85
Survey of Western Art	$25
Sport's Illustrated Swimsuits: Spring Break	$25
Super Fonts	$16
Take 10 Pak VOL II	$40
Terminator Rampage	$35
The Way Things Work	$65
Time Table-Arts and Entertainment	$22
Time Table-Bus, POL, and Media	$22
Time Table-Science And Innovation	$16
Toolworks Multimedia Encyclopedia	$15
Tortoise And the hare	$55
Total Baseball	$14
FO: Enemy Unknown	$27
Under A Killing Moon	$51
US Atlas 4.0	$15
US History	$14
USA Wars: Civil Wars	$19
UUSA Wars: Korea	$19
USA Wars: Vietnam	$19
USA Wars: WWII	$19
Vital Signs	$69
Virtual Vegas	$25
Vivaldi: The Four Seasons	$14
War Craft	$42
War Planes	$43
Webster's Interactive Encyclopedia	$20
Who Shot Johnny Rock ?	$19
Wing Commander II	$20
Wing Commander III	$55
Wing Commander Armada	$53
Wings Over Europe	$35
Wolf 3-D Mania	$13
Word for Dummies(Guidebook)	$20
Wordperfect 6.0 For Dummies (Guidebook)	$22
Word STuff	$19
World Atlas 5.0	$14
World circuit	$19
World of Flight	$19

Adult Titles

101 Sex Positions I	**$29**
101 Sex Positions II	**$29**
A Pussy Called Wanda 2	**$24**
Adult Palate II	**$25**
Biker Babes	**$24**
Busty Babes	**$35**
Busting Out	**$29**
Debbie Does Dallas	**$21**
Dream Machine	**$55**
Domin-A-Tricks	**$24**
Hidden Obsession	**$25**
House of Dreams	**$24**
Immortal Desires	**$25**
Insatiable	**$29**
Interactive Sex Therapy	**$55**
Intimate Journey	**$30**
Leisure Suits Larry VI	**$24**
Maddams Family	**$45**
Mask	**$26**
New Lovers	**$30**
New Wave Hooker 1	**$25**
New Wave Hooker 2	**$25**
Night Watch II	**$27**
Penthouse Photo Shoot II	**$65**
Penthouse Photo Shoot III	**$65**
Pixis Sampler	**$7**
Playboy Interview 3rd Decade	**$40**
Pretty Women	**$15**
Secrets Interactive	**$21**
Seymore Butts	**$50**
Sex	**$25**
Space Sirens	**$45**
Supermodels Go Wild	**$27**
Tracy I Love You	**$27**
Vampire's Kiss	**$42**
Virtual Vixens	**$40**

Mail/Fax Order Form

Name:____________________

Address:____________________

Driver's license# & exp. data:

Credit card# & exp. data:

PO#:____________________

Number of items chosen:________

Subtotal:____________________
Tax:____________________
Total:____________________

Method of Payment:

- **Check/Money order(enclosed)**
- **Credit card (Amex/Visa/Mastercard/Discover)**

Terms and conditions: *No exchanges or refunds on CD-Titles; damaged CD's will be replaced with the same title only; all major credit cards accepted with no surcharges; quality PO's accepted from academic, corporate, and public institutions; APO's welcom; shipping charges are non-refundable; price does not include shipping; prices are subject to change without notice; not responsible for typographical errors.*

- **Prices good thru May 31, 1995**

EMAIL SALES ADDRESS

hd@hdcomputer.com

Tel: (408)720-0493/FAX: (408)720-1967
1196 KERN AVE., SUNNYVALE, CA 94086

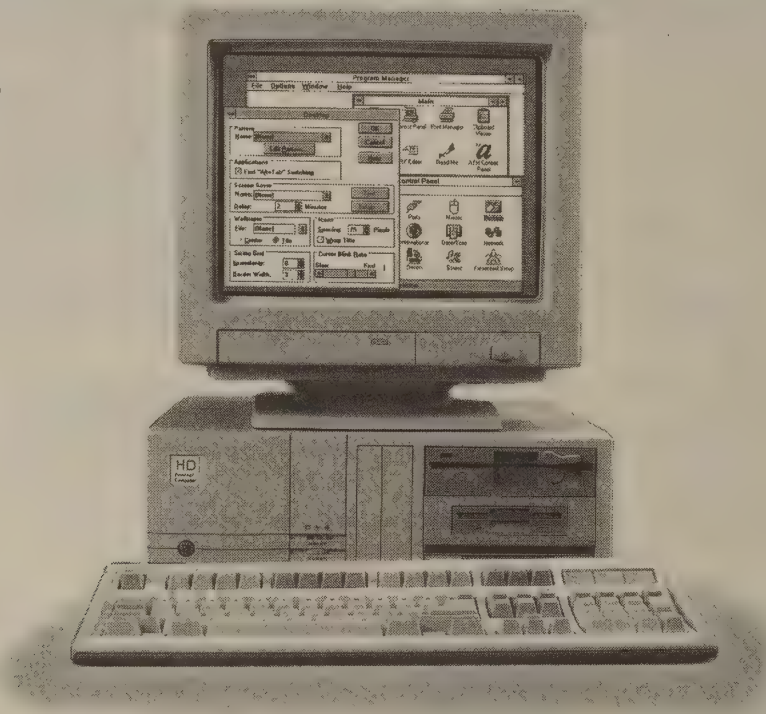
HD COMPUTER
VICTORIA SERIES

Victoria™ Series

NETWORK SYSTEMS

Design, Consultation, Installation, Trouble Shooting, Hardware & Software Configuration, Service & Support.

"We Stand Behind Our Technology, Quality and Service"



PEACH

P5 PENTIUM File Server

- Intel Pentium Processor
- Asus PCI EISA Motherboard
- Full Tower Case w/300 Watt Power Supply
- 32MB RAM/256KB External Cache
- TEAC 1.44 MB Floppy
- 2.1GB SCSI Hard Drive
- Adaptec 2940 PCI SCSI Controller
- 2-16550 High Speed Serial Ports
- 1 Parallel Port
- MGP Card
- 14" Monochraome Monitor
- 101 Key Keytronic Keyboard
- Microsoft Serial Mouse
- Quad Speed Internal SCSI CD-ROM Drive
- HP 35470 Internal 2GB DAT Tape Backup

90MHz	***$4895***
100MHz	***$5095***

BURGUNDY

486 Workstation

- 486SX-33 CPU
- Asus ISA/VESA Motherboard w/128K Cache
- Desktop Case w/250 Watt Power Supply
- 4MB RAM
- TEAC 1.44MB Floppy Drive
- VESA Local Bus 32 Bit SVGA Card w/1MB
- 14" NI SVGA Monitor .28DP
- 101 Key Keyboard
- Microsoft Serial Mouse

$759

HUB

• 4 Port 10 Base-T Hub Card	***$150***
• 8 Port 10 Base-T Hub	***$215***
• 12 Port 10 Base-T Hub	***$485***

Ethernet Adapters

DANPEX

PCI Ethernet Card	***$129***
EN-2400PB 16Bit BNC s/w	***$42***
EN-2400PT 16Bit 10BT s/w	***$39***
EN-2400P3 16Bit Combo 3-in-1	***$47***
EN-6200P2 1PCMCIA Combo	***$150***
EN-6000BT Pocket Lan 10BT	***$135***
EN-400I 4Port 10BT Hub	***$125***
EN-800A 8Port 10BT Hub	***$155***
EN-1212A 12Port 10BT Hub	***$325***
Modular Print-Server For Netware	***$325***

Accesories

RG58 Coax Cable BNC 10'	***$8***
RG58 Coax Cable BNC 25'	***$10***

Microdyne/Novell

NE-2000 Plus 16bit	***$115***
NE-2000T Plus	***$115***
NE-3200 EISA 32bit Coax/TP	***$539***
NE-2000 Plus 3	***$129***

Ethernet Adapters

Compatible

NE-2000 16bit Coax/10BT	***$42***
NE-2000 16bit Combo	***$47***
NE-2000 16bit 5 pack	***$235***
EP-888A Pocket Ethernet BNC+10BT	***$145***
EP-808A 8Port Ethernet HUB	***$199***
EC-812 12Port Ethernet HUB	***$449***
EE-840 32Bit EISA Ethernet	***$289***

Intel

Etherexpress 16 16bit 5 Pack/20pack	***$575/1995***
16bit Ethernet Combo PCLA 8100	***$129***
16bit Ethernet BNC PCLA 8110	***$115***
16bit Ethernet 10BT PCLA 8120	***$115***
16bit Ethernet Combo PCLA 8105/Flash	***$159***

3COM

3C503 Etherlink II 16 Coax/TP	***$167***
3C503 Etherlink II 16 5pack	***$785***
3C507 Etherlink II 16 Coax/TP	***$295***
3C509 Etherlink III Coax/TP	***$117***
3C509 Etherlink III 5pack	***$528***

Ethernet Adapters

SMC

Ether card plus elite 16 Coax/TP	***$119***
Elite ultra 16bit Coax/TP	***$115***
Elite ultra 16bit 6pack/24pack	***$675/2375***
SMC Ultra 16 Bit Ethernet Combo	***$135***

Cogent

PCMCIA UTP	***$199***
32-bit PCI Full Duplex Combo	***$159***
32-bit PCI Full Duplex UTP	***$139***
32-bit PCI 4-Port UTP Full Duplex	***$529***

DLINK

DE-600 TP Pocket Ethernet 10BT	***$199***
DE-205 TP 16Bit Ethernet 4 Port 10BT	***$290***

INFO Express Ethernet Adapter

16Bit BNC/10TP	***$60***
32Bit VLB/Combo	***$139***

Victoria™ Series

COMPAQ

COMPAQ
Deskpro 590

- **Pentium 90 MHz CPU**
- Desktop Case
- 8MB RAM Expandable to 136MB
- 4205MB IDE Hard Disk
- 1024x768 1MB VRAM SVGA Card
- MS DOS 6.2 & Windows 3.1
- Quad Speed CD ROM IN
- Tabworks
- Serial Mouse
- 101 Key Keyboard
- Energy Star Compliant
- 3 Year Worldwide Limited Warranty
- **Monitor Sold Seperately**

$2595

COMPAQ
Prolinea MT

- 486DX2-66 CPU
- Mini Tower Case
- 420MB HDD
- 4MB RAM Expandable to 64MB
- 1024x768 1MB SVGA Card
- MS DOS 6.2 & Windows 3.1
- Tabworks
- Serial Mouse
- 101 Key Keyboard
- Energy Star Compliant
- 3 Year Worldwide Limited Warranty
- **Monitor Sold Seperately**

$1759

COMPAQ
Contura 400 Notebook

- 486DX2-40 CPU w/8KB Internal Cache
- 250MB HDD
- 4MB RAM Expandable to 20MB
- 2 PCMCIA Type II Slots or 1 Type III
- Built-in Trackball
- AC Adaptor/Rechargable Battery
- Weighs 5.9 lbs
- 3 Year Worldwide Limited Warranty

400C PM	**$2245**
400CX AM	**$2795**

VISUAL C++
WINDOWS NT
WINDOWS NT ADVANCED SERVER
WINDOWS FOR WORKGROUPS
OS/2

Warranty Service for Compaq, Everex is Carried By Manufacturer Direct!

NOTEBOOKS

EVEREX

- ***3 Years Warranty***
- ***First Year On-Site Service***
- ***24 Hours Swap***
- Intel Enhanced Processor
- 4MB Expandable to 20 MB
- Removable Display Color DSTN
- Removable 1.44 FDD Disk Drive
- Removable Built-in Trackball
- Removable HDD, 120MB TO 500 MB
- Accelerated 32-bit VESA Local Bus VGA
- 86K, Full function Keyboard
- Built-in Microphone and Speaker
- One PCMCIA Type III or Two PCMCIA Type II
- Dimensions and Weight: Color STN: 11.3" x 8.8" x 1.6"; 5.7 lbs

Step Note 4MB (SX/33,DSTN, NIMH)

250MB/HD EXO-2504M-DCDP	$1970
340MB/HD EXO-2504M-DDDP	$1972
524MB/HD EXO-2504M-DEDP	$2117

Step Note 4MB (DX2/50,DSTN, NIMH)

250MB/HD EXO-2804P-DCDP	$1991
340MB/HD EXO-2804P-DDDP	$1994
524MB/HD EXO-2804P-DEDP	$2140

Step Note 4MB (DX4/75,DSTN, NIMH)

250MB/HD EXO-2904T-DCDP	$2119
340MB/HD EXO-2904T-DDDP	$2122
524MB/HD EXO-2904T-DEDP	$2267

EVEREX

- ***3 Years Warranty***
- ***First Year On-Site Service***
- ***24 Hours Swap***
- Intel Enhanced Processor
- 4MB Expandable to 20 MB
- Removable Display Mono STN
- Removable 1.44 FDD Disk Drive
- Removable Built-in Trackball
- Removable HDD, 120MB TO 500 MB
- Accelerated 32-bit VESA Local Bus VGA
- 86K, Full function Keyboard
- Built-in Microphone and Speaker
- One PCMCIA Type III or Two PCMCIA Type II
- Dimensions and Weight: Mono STN: 11.3" x 8.8" x 1.5"; 5.3 lbs

Step Note 4MB (SX/33,Mono, NIMH)

250MB/HD EXO-2504M-MCDP	$1477
340MB/HD EXO-2504M-MDDP	$1480
524MB/HD EXO-2504M-MEDP	$1624

Step Note 4MB (DX2/50,Mono, NIMH)

250MB/HD EXO-2804P-MCDP	$1499
340MB/HD EXO-2804P-MDDP	$1502
524MB/HD EXO-2804P-MEDP	$1647

EVEREX

- ***3 Years Warranty***
- ***First Year On-Site Service***
- ***24 Hours Swap***
- Intel Enhanced Processor
- 4MB Expandable to 20 MB
- Removable Display Color TFT
- Removable 1.44 FDD Disk Drive
- Removable Built-in Trackball
- Removable HDD, 120MB TO 500 MB
- Accelerated 32-bit VESA Local Bus VGA
- 86K, Full function Keyboard
- Built-in Microphone and Speaker
- One PCMCIA Type III or Two PCMCIA Type II
- Dimensions and Weight: Color TFT: 11.3" x 8.8" x 1.7"; 6 lbs

Step Note 4MB (DX2/50,TFT, NIMH)

250MB/HD EXO-2804P-TCDP	$2929
340MB/HD EXO-2804P-TDDP	$2931
524MB/HD EXO-2804P-TEDP	$3076

Step Note 4MB (DX4/75,TFT, NIMH)

250MB/HD EXO-2904T-TCDP	$3000
340MB/HD EXO-2904T-TDDP	$3003
524MB/HD EXO-2904T-TEDP	$3149

Step Note 4MB (DX4/100,TFT, NIMH)

250MB/HD EXO-2904R-TCDP	$3135
340MB/HD EXO-2904R-TDDP	$3138
524MB/HD EXO-2904R-TEDP	$3283

EVEREX
Notebook Upgrade

Memory Upgrade 4MB to 8MB	**$220**
PCMCIA 144 Fax Modem	**$119**
PCMCIA Ethernet Card	**$149**
Carrying Case	**$15**

EMAIL SALES ADDRESS
hd@hdcomputer.com

SALES HOURS:
9:00AM - 6:00PM WEEKDAYS,
10AM - 6PM SATURDAYS (PACIFIC TIME)

SUNNYVALE
Tel: (408)720-0493/Fax: (408)720-1967
1196 Kern Ave., Sunnyvale, CA 94086

SAN FRANCISCO
Tel: (415) 434-8118/Fax: (415) 434-8128
500Washington St., San Francisco, CA 94111

EL CERRITO
Tel: (510)528-0753/Fax: (510) 528-0757
10005 San Pablo Ave., El Cerrito, CA 94530

SACRAMENTO
Tel: (916) 483-4278/Fax: (916) 483-4826
2530 Watt Ave., Sacramento, CA 95821

FRESNO
Tel: (209) 446-0809/Fax: (209) 446-0819
6481 North Blackstone Ave., Fresno, CA 93710

TERMS AND CONDITIONS: • 30 days return policy • 1 year parts + labor warranty • Major credit cards accepted • No surcharge for VISA, MC, AE and Discover Cards • Quality PO's accepted from Academic, Corporate and Public Institutions • APO's welcome • Shipping charge not refundable • Return shipments must be insured, prepaid and bear an RMA# on the shipping label • Price does not include shipping • Price are subject to change without notice • Component warranties offers and claims are handled by the manufacturer • Components Compatibility is not guaranteed • No return on used items • All open returns are subject to 15% restocking fee • No exchanges or refunds on CD's will be replaced with the same item only. • Allow 14 days to process refund • Not Responsible for typographical errors. • Prices good thru May 31, 1995

VISA MasterCard AMERICAN EXPRESS

HD COMPUTER
VICTORIA SERIES

Victoria™ Series

Quality From The Company You Know & Trust!

Monthly Special

17" SVGA Monitor	*$439*
420 MB IDE Conner HDD	*$155*
Sony 55E 2X CD ROM	*$115*
50 watt Stereo Speaker	*$29*
US Robotics 144 Int	*$89*
NE-2000 Ethernet Card	*$25*

Motherboards

American Megatrends AMI (W/CPU)

60 MHz EISA/PCI Excalibur 256K	$1195
60 MHz PCI/VLB Excalibur 256K	$1095
60 MHz PCI/ISA Excalibur 256K	$1095
486 EISA/VESA Enterprise III 256K 33/66MHz	$860/945
486 EISA/VESA Enterprise IV 256K 33/66MHz	$740/835
486 VLB/ISA Super Voyager 256K 33/66MHz	$575/695

Micronics (W/O CPU)

90 MHz PCI /ISA Neptune 256K	$445
66/60 MHz EISA/PCI M5PE 256K	$615
60 MHz PCI/ISA 3PCI Slots 256K	$485
486 EISA E2 256K	$395
486 EISA/VLB 256K	$495
486 JX30 VLB/ISA 256K	$285
486 VLB/ISA 256K	$235

Asus (W/O CPU)

90 MHz EISA/PCI Dual Processor	$895
60 MHz EISA/PCI 256K	$395
486 PCI/ISA Saturn 256K on Board IDE SCSI	$295
486 VLB/ISA SIS Green 128K	$145
486 VLB/ISA Support DX4 256K	$175
Pentium586 -90MH PCI/ISA/256K	$350
Pentium586 -66/60MH PCI/ISA/256K	$300
486 PCI VLB/256K	$195

Controllers

adaptec

1522A ISA/SCSI Fast w/Kit	$139
1542CF ISA/SCSI Bus Master w/Kit	$249
1542CF+ ISA/SCSI w/Corel Kit	$314
2742T EISA/SCSI 14HDS w/Kit	$359
2842VL VLB/SCSI Fast w/Kit	$259
2825VLK Fast SCSI w/E IDE	$259

Controllers

adaptec

2940 PCI/SCSI w/Kit	$279
2940W PCI/SCSI Wide SCSI w/Kit	$379
PCMCIA SLIM SCSI	$289
SCSI AudioMachine™	$298
TotalCD™	$49
TotalConnect™	$89
TotalAdvantage™ VL	$159

AMI American Megatrends

EISA/SCSI Caching Controller	$389

DTC

DTC 2278 VLB/IDE	$39
DTC 3280 ISA/SCSI	$139
DTC 3270 VLB/SCSI	$119
DTC 3290 EISA/SCSI Caching	$499

Buslogic

BT 542B ISA/SCSI Bus Master w/Kit	$209
BT 545S ISA/SCSI Fast w/Kit	$208
BT 445S VLB/SCSI w/Kit	$199
BT 742KT EISA/SCSI w/Kit	$329
BT 747AK EISA/SCSI Fast	$369
KT 946C PCI/SCSI Support 8GB	$239

Future Domain

TMC 850 ISA/SCSI 8Bit	$59
TMC 1670 ISA/SCSI 16Bit	$149
TMC 1680 ISA/SCSI/4FD	$139

Q Logic

Fast ISA/SCSI Kit	$124
Fast VLB/SCSI Kit	$189
Fast EISA/SCSI Kit	$199
Fast PCI/SCSI Kit	$289

NCR

NCR PCI/SCSI 810 SCSI II	$95
NCR PCI/SCSI 825 SCSI II & Wide SCSI	$145

Trantor

EPP Mini SCSI	$209

Others

PCI/IDE IDE Enhanced	$42
DPT EISA/SCSI Fast w/Kit	$419
VLB/IDE w I/O	$45
ISA/IDE 16Bit w I/O	$25
Super IDE 16Bit w/16550	$59
AT/IO 2 Serial 1 Parallel	$19

Video Cards

ATI

Graphics Ultra Pro Turbo 64 PCI/4MB	$589
Graphics Ultra Pro Turbo 64 PCI/VLB/2MB	$379
Graphics Expression PCI/VLB 1MB DRAM	$159
Graphics Expression PCI/VLB 2MB DRAM	$199

Diamond

Stealth 64 PRO Video PCI/2MB VRAM	$339
Stealth 64 PRO Video PCI/4MB VRAM	$469
Stealth 64 PCI/VLB/2MB DRAM	$219
Stealth 64 PCI/VLB/1MB DRAM	$179
Viper Pro Video PCI/2MB	$429
Viper SE PCI/VLB/4MB	$509
Viper SE PCI/VLB/2MB	$359
Speed Star 64 2MB	$199
Speed Star 64 1MB	$149
Stealth 32 PCI/2MB	$189
Speed Star Pro PCI/VLB/1MB	$119

matrox

MGA-ULT/2+ VLB/2MB	$429
MGA-IMP/31A VLB/ISA/3MB	$739
MGA-PCI/2 PCI/2MB	$399
MGA-PCI/2+ PCI/Upgradeable to 4MB	$429
MAT IMP Plus PCI 2MB	$415
2MB Memory for MGA-PCI/2+	$275
Impression Lite PCI 2MB	$349

Number Nine

9GXe 64 PCI/VLB/1MB	$179
9GXe 64 PCI/VLB/2MB	$249
9GXe 64 Pro PCI/VLB/2MB	$349
9GXe 64 Pro PCI/VLB/4MB	$499
9GXe 64 Pro-1600 PCI/VLB 2MB VRAM	$589
9GXe 64 Pro-1600-100 PCI/VLB 4MB VRAM	$589
9GXe 64 Imagine-128 PCI 4MB VRAM	$849
9GXe 64 Imagine-128-1600 PCI 4MB VRAM	$1135
9GXe Memory Upgrade from 2MB to 4MB	$199

Orchid

Kelvin 64 VLB/PCI/2MB	$229
Kelvin 64 VLB/PCI/1MB	$159
Fahrenheit T64 PCI/VLB 1MB DRAM	$179

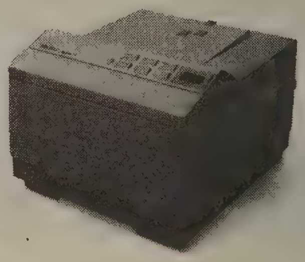
Others

M.G.P. Card	$15
256K ISA/VGA	$35
1MB ISA/SVGA	$59
1MB DRAM Upgrade	$48
1MB VRAM Upgrade	$85

Printer

HEWLETT PACKARD

Portable 320	$299
Deskjet 540	$295
Deskjet 560C	$495
Laserjet 4L	$649
Laserjet 4+	$1399
Laserjet 4V	$1995
Laserjet 4si	$2895
Color Kit for 540	$49
Postcript for HP4 Laser	$329
Postcript for HP4si	$575
Memory for HP4	$48 PerMB
Toner for HP4	$109
Toner for HP4L 4P	$69
Toner for HP 4si	$135



Okidata

400e/410 e	$475/639
Alps Lsx 1000 Laser	$1190
Printer Stand	$14.50

Clearance Items

Available at Sunnyvale Location Only

Logitech Audioman	$69
Logitech Soundman	$79
Gallant SC 50 8Bit Sound Card	$39
Gallant SC 6000 16Bit Sound Card	$89
NEC 3XE CD ROM	$369
Plextor 2X EXT CD ROM	$270
Plextor 2X INT CD ROM	$199
Tyin 2000 Modem	$149
24/48 Modem	$29
Zoltrix 24/96 Modem	$39
Genoa 8900 PCI SVGA Card W/2MB	$169

Victoria™ Series

COMPUTER SHOPPER

BYTE

intel inside

Quality From The Company You Know & Trust!

Tape Drive

COLORADO MEMORY SYSTEMS INC.

olorado Internal 700	$295
olorado Trakker 350	$349
J-35 350MB/INT	$179
J-20 250MB/INT	$149
racker 250MB EXT	$317
racker 330MB EXT	$349
racker 700MB EXT	$529
C-20 Controller	$79
ower Tape PT-25 2GB/INT	$965
ower Tape PT-50 4GB/INT	$1525

CONNER

150S Viper 250MB INT/EXT	$317/424
20MB INT/EXT	$195/320
525S Viper 525MB INT/EXT	$459/559
750 1.3GB INT/EXT	$799/899

WangDAT.

100DAT 2.0GB INT/EXT	$849/949
200DAT 4-8GB INT/EXT	$899/999

HEWLETT PACKARD

.0GB	35470DAT	INT/EXT	$799/899
-8GB	35480DAT	INT/EXT	$889/999
-16GB	C1533A	INT/EXT	$1099/1195
Mounting Kit			$35

EXABYTE

2.0GB	EXB-4200C	INT/EXT	$949/1035
5.0GB	EXB-8505	INT/EXT	$2069/2499
1.5GB	EXB-2501	2NT/EXT	$529/685

Monitors

NEC

2V 1024 x 768 .28 Flat	$359
XV15 1024 x 768 .28 Flat	$489
XE15 1024 x 768 .28 Flat	$578
XP15 1024 x 768 76 HZ	$679
XE17 1024 x 768 .28 Flat	$998
XP17 1024 x 768 76 HZ	$1249
XE21 1280 x 1024 .28 764Z	$1994
XP21 1600 x 1200 76HZ Opticlear	$2495

Sony

CPD 1425	$349
GPD-15SF 15"NI 1280x1024 .25	$419
GDM-17SE 17"NI 1600x1200 .25	$1989
GDM-20SE 20"NI 1280x1024 .30	$1795
GDM-17SF 17"NI	$820

NANAO

F550i 17"NI 1280x1024 .28	$855
F550iw 17"NI 1280x1024 .28	$925
F560iw 17"NI Green Monitor	$1199

Monitors

NANAO

F560i 17"NI 1280x1024 .25	$1395
F660i 20"NI 1280x1024 .31 Trintron	$2095
F760iw 21"NI 1280x1024 .31	$1925
F780iw 21"NI 1600x1280 .26	$3115
T-2 17" NI	$1350
T-2 20"	$1990
F-2 15"	$549

NOKIA

449E 15"NI 1280x1024 .28	$499
447X 17"NI 1600x1280 .25	$999
445M 21"NI 1280x1024 .26	$1999
445X 21"Ni 1600x1280 .26	$2599

MAG

DX15F 15"NI 1280x1024 .28	$336
DX17F 17"NI 1280x1024 .26	$599
MX17FG 17"NI Green, Led, Flat	$849
MXP-17F 17" NI 1600X1280	$999
MX21 NI 1600X1280	$2499

ViewSonic

V-6E 14"NI .28	$265
15"G NI 1024x768 .28	$379
V-17 17"NI 1600x1280 .27	$899
V-17G 17"NI 1280x1024 .28	$699
V-20 20"NI 1600x1280 .28	$1449
V-21 21"NI 1600x1280 .26	$1595

Impression

1439 14" 1024x768 .39	$205
1428 14" 1024x768 .28	$225
1428N 14"NI 1024x768 .28	$235
1528 15"NI 1280x1024 .28	$325
IMP-17 17"Ni 1280x1024 .28	$649

Epson

Epson 17" Monitor	$669

Optiquest

1562A 15" 0.28 1024 x 768	$339
2000DS 15" 0.28 1024 x 768	$359
2000DC 15" 0.27 1280 x 1024	$399
4000DC 17" 0.27 1280 x 1024	$699
4000TC 17" 0.26 1280 x 1024	$829
4500DC 17" 0.28 1600 x 1280	$769
2082DC 20" 0.28 1600 x 1280	$1399

Others

14" Mono Monitor	$95
14" VGA Mono Monitor	$119
14" Black NI Monitor	$265
15" Black NI Monitor	$395
17" 1024x768 NI .42	$499

Modems

USRobotics U.S. Robotics

14.4K Fax Modem INT/EXT	$92/119
28.8 V.34 Fax Modem NT/EXT	$219/255
Courier 28.8 Modem	$415/455

CREATIX

14.4 Internal Modem, Class I	$49
14.4 External Modem, Class I	$79
14.4 Internal w/Voice	$69
28.8 V.34 Internal Modem	$149
28.8 V.34 External Modem	$169
14.4 PCMCIA	$119

Supra Corporation

14.4i Fax Modem Internal Express	$79
14.4i Fax Modem External	$119

Q Logic

Q Logic Fast SCSI PCMCIA-10	$202

Hard Disk

MAXTOR

CONNER

Seagate

WESTERN DIGITAL

Quantum

FUJITSU

MICROPOLIS

IBM

HEWLETT PACKARD

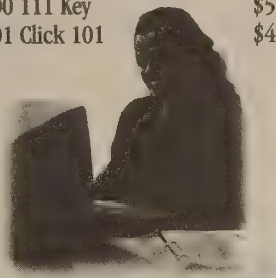
Best Price in Town! Please Call!

Mouse / Keyboard

Microsoft Bus Mouse (OEM)	$55
Microsoft Bus Mouse	$98
Microsoft Serial Mouse (OEM)	$28
MS Ballpoint Mouse	$38
Mouseman Cordless	$89
Logitech First Mouse	$39
Logitech Mouseman	$55
Logitech Bus Mouse	$65
Logitech Trackball	$74
Logitech Sensa	$65
Logitech Wingman Joystick	$39
3-Button Serial Mouse	$9
101 Enhanced Keyboard	$29

Mouse / Keyboard

Keytronic 101 Keyboard	$36
OMNI 101/102/Ultra	$98
Focus 9000 129 Key	$65
Focus 8000 111 Key	$55
Focus 2001 Click 101	$42



Scanner

Logitech Scanman Color	$429
Scauman Easytouch	$209
Scanman 256	$189

EMAIL SALES ADDRESS

hd@hdcomputer.com

SALES HOURS:
9:00AM - 6:00PM WEEKDAYS,
10AM - 6PM SATURDAYS (PACIFIC TIME)

SUNNYVALE
Tel: (408)720-0493/Fax: (408)720-1967
1196 KERN AVE., SUNNYVALE, CA 94086

SAN FRANCISCO
Tel: (415) 434-8118/Fax: (415) 434-8128
500WASHINGTON ST., SAN FRANCISCO, CA 94111

EL CERRITO
Tel: (510)528-0753/Fax: (510) 528-0757
10005 SAN PABLO AVE., EL CERRITO, CA 94530

SACRAMENTO
Tel: (916) 483-4278/Fax: (916) 483-4826
2530 WATT AVE., SACRAMENTO, CA 95821

FRESNO
Tel: (209) 446-0809/Fax: (209) 446-0819
6481 NORTH BLACKSTONE AVE., FRESNO, CA 93710

TERMS AND CONDITIONS: • 30 DAYS RETURN POLICY • 1 YEAR PARTS + LABOR WARRANTY • MAJOR CREDIT CARDS ACCEPTED • NO SURCHARGE FOR VISA, MC, AE AND DISCOVER CARDS • QUALITY PO'S ACCEPTED FROM ACADEMIC, CORPORATE AND PUBLIC INSTITUTIONS • APO'S WELCOME • SHIPPING CHARGE NOT REFUNDABLE • RETURN SHIPMENTS MUST BE INSURED, PRE-PAID AND BEAR AN RMA# ON THE SHIPPING LABEL • PRICE DOES NOT INCLUDE SHIPPING • PRICE ARE SUBJECT TO CHANGE WITHOUT NOTICE • COMPONENT WARRANTIES OFFERS AND CLAIMS ARE HANDLED BY THE MANUFACTURER • COMPONENTS COMPATIBILITY IS NOT GUARANTEED • NO RETURN ON USED ITEMS • ALL OPEN RETURNS ARE SUBJECT TO 15% RESTOCKING FEE • NO EXCHANGES OR REFUNDS ON CD'S WILL BE REPLACED WITH THE SAME ITEM ONLY... • ALLOW 14 DAYS TO PROCESS REFUND. • NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS. • PRICES GOOD THRU MAY 31, 1995.

VISA MasterCard AMERICAN EXPRESS

HD COMPUTER
VICTORIA SERIES

LAPTOPS • BY ED KAHN

World's Smallest Tape Backup System

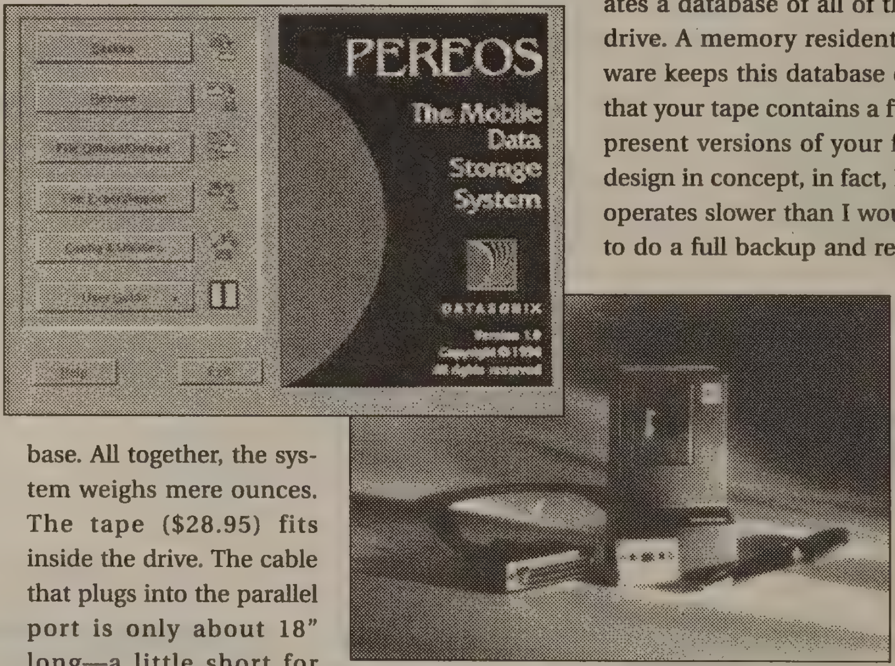
The Datasonix Pereos Can Be Seen As A Product In Progress That Is Worth Getting Right Away

As hard drives have increased in storage capacity, the need for sophisticated backup procedures has also increased. The days of backing up to a set of floppy disks are long gone and portable users are increasingly faced with the problem of how to maintain good backup of their files—especially when they are on the road. Until recently, the best backup systems I have seen were about the size of a midsize tape recorder and definitely not something you would routinely take on-the-go. But now we have an alternative, the Datasonix Pereos tape backup system. This device connects to the parallel port and is the size of a bar of soap. The tape itself has the footprint of a postage stamp and the thickness of three quarters stacked together—with a capacity up to 1GB!

If this all sounds too good to be true, it kind of is. In fact, this capacity is a potential that will be realized only after the company completes the newest versions of its software. Currently, with my desktop machine, I was able to backup a little over 300MB. When I mentioned this to the company, they sent me an enhanced parallel port to try and their newest software. This increased the capacity considerably and actually allowed me the full gigabit of data.

I review this hardware/software package now because I think it is sufficiently significant to be brought to your attention. Even if you buy the system now, it will answer a need that currently goes unanswered. But by the middle of the summer, I suspect that I could review the product without reservation. They tell me that they are working towards more and more sophisticated software that will answer most of my complaints.

The Pereos system consists of a base that connects to the parallel port of your computer. It is about the size of a box of toothpicks and is powered by a couple of AA batteries that will last up to four months. The tape drive itself, which is about the size of a bar of soap, plugs into the base. All together, the system weighs mere ounces. The tape ($28.95) fits inside the drive. The cable that plugs into the parallel port is only about 18" long—a little short for me—but an extension splitter ($59.95) lets you use the Pereos and the printer at the same time. The idea behind this design is that you may want to buy additional bases ($99) and simply carry the tape drive unit with you. In this way, you can synchronize several computers and never be without the most up-to-date version of any file.



The software that comes with the unit is extremely sophisticated. It is designed to do automatic backups in any fashion you instruct the software. You can, for instance, tell the software to do a backup of all changed files every night at midnight. When you restore, you have the option of restoring any of the different versions that are on the tape. The system operates with almost no sound, unlike most of the conventional tape backup units I have tested.

After installation, Pereos automatically creates a database of all of the files on your hard drive. A memory resident portion of the software keeps this database current. The result is that your tape contains a full record of past and present versions of your files. While I like the design in concept, in fact, I find that the system operates slower than I would like. When I want to do a full backup and restore, I am not really concerned about the time it takes as I usually do this kind of housekeeping in the middle of the night. But when I want to restore a single file, I want to be able to get to it right away and be done with the task. The design of the current version of the software makes this simple task take too long.

While the company advertises that the tiny tape will hold over a gigabit of data, in fact after about 500MB you will have to turn the tape over in order to record the rest of the files. This means that unattended backups of large hard drives are simply not possible. In any case, getting this kind of capacity out of the tape requires that you have an enhanced parallel port. While many portables do come with this kind of setup, many of the manufacturers skimp on the parallel port with the result that data

CALIFORNIA LS INC.

FREMONT
48890 Milmont Drive, 106D
Fremont, CA 94538
510-656-9885
Fax: 510-440-9566
Mon-Fri 10am to 6pm

SAN FRANCISCO
1875 Mission Street (14th)
San Francisco, CA 94103
415-241-9185
Fax: 415-241-9186
Tue-Sat 9:30am 5:30pm

Corporate..Dealer.. Government..Bids Welcomed!!

Advertised prices based on 3% cash purchase discount. Price subject to change without notice,

OFFICE SYSTEM

Intel Pentium **P5-75MHz CPU**	**$1799**
Intel Pentium **P5-90MHz CPU**	**$2099**
Intel Pentium **P5-100MHz CPU**	**$2199**

64 BIT WARP SPEED PENTIUMSIS PCI Motherboard
PCI IDE I/O Controller
8MB Ram 70ns
Middle Tower Chassis w/CPU Fan
230 Watts Power Supply
850 MB IDE Hard Drive
3.5" 1.44 Floppy Drive
14" .28 N.I. Digital Monitor
PCI SVGA Video Card w/1MB
TEAC Super Quad 4x Speed CD ROM
Creative Lab Sound Blaster 16
EP 50 Watts Shielded Speakers
Power Center w/Surge Protection
101 Enhanced Keyboard
3 Button Mouse
Power Saving Green PC
14 CD Title & Mouse Pad
Free Technical Support

HOME SYSTEM

DX2 80MHz MULTIMEDIA	**$1289**
DX4 100MHz MULTIMEDIA	**$1349**

AMD486DX2-DX4 VLB Motherboard w/Cooling Fan
32 Bit VLB IDE 2s;1p;1g;2FD;4HD
4MB Ram 70ns
Middle Tower Chassis w/Fan
230 Watts Power Supply
Conner 540MB IDE Hard Drive
3.5" 1.44 Floppy Drive
14" .28 N.I. Digital Monitor
Trident 32Bit SVGA w/1MB
Sony/Mitsumi/Panasonic 2x CD ROM
Media Magic 16Bit Stereo Sound Card
12 Watts Shielded Speakers
101 Enhanced Keyboard
3 Button Serial Mouse
Power Saving Green PC
14 CD Title & Mouse Pad
Free Technical Support

BEST BUY!!

$999

486DX2 STARTER SYSTEM
AMD 66MHz CPU w/Cooling Fan
32Bit VLB IDE 2s;1p;1g;2FD;4HD
4MB Ram 70ns
Mini Tower Chassis
230 Watts Power Supply
Conner 420MB Hard Drive
3.5" 1.44 Floppy Drive
14" .28 N.I Monitor
Trident 32 Bit SVGA w/1MB
101 Enhanced Keyboard
3 Button Serial Mouse & Pad
Power Saving Green PC
Free Technical Support

HP PRINTERS

Everyday Low Prices	$Call

ACCESSORIES

ISA IDE 2S;1P;1G Port	$15
VLB IDE I/O 4HD/2FD	$19
16550 ISA IDE 2S;1P;1G	$29
16550 VLB IDE 2S;1P;1G	$39
3 Button Serial Mouse	$12
Microsoft Ergonomic Mouse	$32
14.4K Wiseland Int. Fax Modem	$49
14.4K Wiseland Int. Voice Fax Modem	$65
14.4K Wiseland Ext. Fax Modem	$95
14.4K Wiseland Ext. Voice Fax Modem	$119
28.8K Wiseland Int. Fax Modem	$139
28.8K Wiseland Ext. Fax Modem	$179
14.4K Sportster Int. Fax Modem	$95
28.8K Sportster Int. Fax Modem	$235
420 MB Conner Tape Backup	$179
50 Diskettes w/Labels	$25
Power Center w/Surge Protection	$20
Keyboard Drawer	$20
Mouse Pockets	$5
Mouse Pad	$2
Monitor Extension Arm	$29
Anti-Glare Screen Filter	$10
Parallel Cable	$10
101 Chicony Enhanced Keyboard	$20
Focus 2001 Click Keyboard	$39
Mini Tower Chassis 230Watts	$40
Middle Tower Chassis 230Watts	$55
Medium Tower Chassis 230Watts	$65
Full Tower Chassis 230Watts	$95

UPGRADES/MISC.

Above system upgrade options	$Call
30pins/72pins Memory Modular	$Call
Hundreds of CD titles in stock	$Call
Come and see our showcase	

VIDEO OPTIONS:

Mono Graphic Card	$15
VGA 256K	$24
VGA 512K	$34
Trident 16 Bit SVGA w/1MB	$55
Trident 32 Bit SVGA w/1MB	$75
Trident 64 Bit SVGA w/1MB	$85
Shamrock Monitors:	
14".28N.I.Digital SVGA	$210
15".28N.I.Digital Flat Screen 76Hz	$299
17".28N.I.Digital Low Radiation 76Hz	$549

HARD & FLOPPY DRIVES

420 Conner IDE Hard Drive	$165
540 Conner/Maxtor/Quantum	$189
850 MB IDE Hard Drive	$290
1.08 Western Digital Hard Drive	$399
1.2 GigaByte SCSI Hard Drive	$545
2.0 GigaByte SCSI Hard Drive	$1015
SCSI Adaptec Cards	$Call
1.2 MB Floppy Drive	$44
1.44 MB Floppy Drive	$34

MOTHERBOARD WITH CPUs

386DX-40MHz w/128K Cache (Upgradable to 486)	$99
AMD 486DX2-66 VLB w/256K Cache	$240
AMD 486DX2-80 VLB w/256K Cache	$260
AMD 486DX4-100 VLB w/256K Cache	$310
Intel Pentium P5-75MHz PCI w/256K	$510
Intel Pentium P5-90MHz PCI w/256K	$889
Intel Pentium P5-100MHz PCI w/256K	$1030

MULTI-MEDIA

Sound Blaster 16	$75
Sound Blaster 16 MCD	$85
Media Magic ISP 16 Stereo	$65
Panasonic 2x CD ROM	$119
Sony IDE 2x CD ROM	$119
Mitsumi IDE 2x CD ROM	$119
Toshiba XM 4x CD ROM (SCSI)	$289
TEAC Super Quad 4x CD ROM	$179
5Watts to 120Watts Speakers	$Call
CD Titles & Shareware titles	$Call

VIRTUOCORP PCMCIA CARDs

CFM-1414C Data,Fax,Voice	$149
CFM-1414RI Data,Fax,Cellular	$199
CFM-2814R Data,Fax V.34 Modem	$349
PCMCIA Card Reader Type II & III	$159

PCMCIA cards compatible with current offerings of Notebook, Sub-notebook and Palmtop computers from ABC, ACER, AST, BICOM, CHAPLET, COMPAL, COMPAQ, COMPUADD, COMPUDYNE, DELL, HP, IBM, MODERN, NEC, NCR, PANASONIC, SHARP, TOSHIBA, TWINHEAD, WONG's, Zenith and more......

transfer is slower and capacity of the tape is diminished. Future versions of the software will get maximum capacity and speed even out of older and less sophisticated parallel ports.

I also found that backing up a relatively small hard drive of several hundred megabytes took well over an hour. When I complained, I learned that one reason is that this system does an automatic verify. If you set a conventional tape backup system to record and then verify your files, it will also double the time it takes to complete the backup. Again, when I have backups done in the middle of the night, I don't care about the time, but when I am in a hurry I generally skip the verify pass, thus reducing the time it takes to make a full backup. Unfortunately, Pereos does not allow this option.

I spent a good deal of time on the phone with Datasonix's technical support people. One thing I can assure you is that they are competent, courteous, and patient. I was almost always able to get through on the first try and found them to be extremely efficient. This is a real plus. As I raised the questions that came to mind, I was given assurance that these were problems that were being addressed and would be solved in future software releases. Anyone who buys today will get the newest software as it becomes available.

While I wish the enhancements that are being planned were available today, I can nevertheless recommend this product for those who need a tiny tape backup with large capacity. Carrying the drive and tape with you makes a lot of sense. I have enough confidence in this company to believe that all of the promises made about future software will indeed happen. In a sense, this is a product in progress, but it may be one worth getting right away and enjoying even greater benefits as new versions of the software are released. The hardware platform is fully developed and works to perfection. ■

RESOURCES:

Pereos Tape Backup, $649
Datasonix
5700 Flatiron Pkwy.
Boulder, CO 80301
1-800-328-2779

ARMNOTE PENTIUM MULTIMEDIA NOTEBOOK

•810MB HARD DISK (upgradable!) gives you maximum capacity in a notebook •ACTIVE MATRIX 10.4" COLOR SCREEN provides brightest and biggest graphics •DUAL SCAN 10.5" DISPLAY offers big, clear and most cost-effective color screen •INTEGRATED 16-BIT MICROPHONE AND SPEAKER lets you record, compress, playback and edit audio in the disk

- Intel Pentium 75 or 90 MHz Processor
- 64 Bit 256K Ext. Burst Cache RAM
- 64 Bit, 8MB RAM (Expand to 40MB)
- 10.4" Dual Scan or 10.5" Active Matrix VGA Display
- 340/540MB or 720MB Upgradable HDD
- PCI Local Bus Video w/1 MB
- PCI Local Bus Controller
- 16 Bit Stereo Audio
- Built-In Stereo Speakers & Microphone
- 3.5" Built-In Disk Drive
- Two Type II/One Type III PCMCIA
- Infrared Control
- Built-In Center Trackball
- NiMH Battery & AC Adapter
- MS DOS 6.22 & WFW 3.11 • Case

- 486SX/DX/DX2/DX4 Upgradable Intel CPU
- 4MB RAM (upgradable to 20MB)
- 260 to 810 MB Upgradable Hard Drive
- Internal 3.5" 1.44 MB Floppy Drive
- Two PCMCIA Type II Slots or One Type III Slot
- Built-In Center Trackball w/Palmrest
- Built-In Sound Card & Speakers
- Serial/Parallel/Keyboard/Mouse/Ext SVGA & Docking Station Ports
- 1MB VESA Local Bus Video w/Accelerator Card
- MS DOS 6.X & Windows 3.1
- NiMH Battery, AC Adapter, Carrying Case
- **1 Year Parts, 3 Years Labor Warranty**

ARMNOTE TS30P PENTIUM 90	540MB	720MB
DUAL SCAN COLOR 10.4"	$3299	$3499
ACTIVE MATRIX COLOR 10.5"	$4499	$4699

ARMNOTE TS30 w/260MB	SX-33	DX2-50	DX2-66	DX4-75/100
Mono 9.5"	$1419	$1449	$1509	$1559/1629
Dual Scan Color 10.5"	$1889	$1919	$1979	$2029/2099
Active Matrix Color 9.5"	$2519	$2549	$2599	$2659/2719

Twinhead

- Intel DX2/50 or DX4/100 MHz
- Removable 260/340/500/800 MB HD
- 4/8 MB RAM (upgradable to 32 MB)
- 9.5" Dual Scan or Active Matrix Color Screen
- 25mm center trackball or optional touchpad pointing device
- VESA Local Bus Video
- Built-in 16-Bit sound chip with microphone and stereo speakers
- DOS 6.X and Windows 3.X
- NiMH battery and AC adapter charger

Slimnote® 5

486DX2/50/340MB MONO	$1744
486DX2/50/340MB/4MB DUAL SCAN COLOR	$2319
486DX2/50/340MB/8MB ACTIVE COLOR	$3389
486DX4/100/520MB/8MB ACTIVE COLOR	$4029

ACER

- 486SX-33 to DX4-100 CPU's
- 210MB to 540MB HD
- 4 or 8 MB Standard
- 9.5" Dual Scan or Active Matrix Color
- Center 19mm Trackball
- Two PCMCIA Slots

Color Starting from $1799

NAME BRAND

- 486DX-25 MHz
- 80MB Hard Drive
- 4MB RAM
- Trackball
- PCMCIA Slot
- FREE Case

$899

IBM

- 486SX-25 MHz CPU
- 125MB Hard Drive
- 4MB RAM
- 3.5" Floppy Drive
- 10" VGA Mono Screen
- Built-In Trackpoint
- DOS
- ValuePoint Software

$999

IBM
ThinkPad 360/510/750/755
Monochrome & Color NoteBooks
CALL FOR PRICES

TOSHIBA
1960/2100/2150/2400/2450/3600/4700/4800/4850/4900
Monochrome & Color Notebooks
CALL FOR PRICES

NOTEBOOKS FROM:
NEC, ZENITH, T.I., AST,
COMPAQ, ACER & MORE
CALL FOR PRICES

SCSI CARD	$179
NETWORK CARD	$139
FAX MODEM 28.8	$299
FAX MODEM 14.4	$129
FAX MODEM 9624	$79
Portable CD-ROM 2X SPEED	$349

WE ALSO CARRY ALL NOTEBOOKS & LAPTOP MEMORY AND BATTERIES

ARM Computer Inc.
EMAIL: kimsunghoi@aol.com
(408) 428-9800
FAX: (408) 428-9528
CALL ABOUT OUR LEASE-TO-OWN PROGRAMS
CORPORATE PO'S WELCOME
2149-A O'TOOLE AVE.
SAN JOSE, CA 95131
Hours: Sat 8-4 Mon-Fri: 8-6:30

Networks Я Us

Specializing in :

Software
- Windows/ WFW/ NT
- LAN/ Wan
- Internet connections
- System :
  Install/ Startup/ Maintain

Hardware
- Telephone Systems
- Tailored computers
- Remote Access System
- Cable install for :
  LAN/ Telephone/ Fiber

Call us for a free consultation :
we are NET+ inc **415 851-5353**

HIGHEST TECHNOLOGY LOWEST PRICE BEST SUPPORT

FASTER THAN FAST

Many Stores include DOS 6.12 and below, we include MS-DOS 6.22!

486-66MHz VESA Machine

- **INTEL 406DX-66MHz**
- **4MB RAM**
- **3.5" Floppy Drive**
- **420MB Hard Drive**
- **Local Bus VESA Turbo IDE Windows accelerator extra fast (5 Times Faster)**
- **Green PC Includes: Energy Star power supply, automatic monitor shut off & power down hard drive**
- **Windows Sound on PC Speaker**
- **101 Keyboard & Mouse**
- **Special Software Bundle**
- **MS-DOS 6.22, Windows 3.11, & Mouse**
- **On-Site Service**
- **Free Classes**
- **Monitor not included**

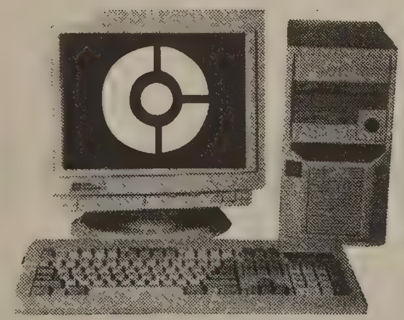
$995
w/ad exp. 5/29

486-66MHz VESA Multimedia

Same as system 486-66MHz VESA MACHINE above PLUS

- **Creative Labs Sound Blaster Discovery CD-16 Kit w/ 15 titles including: Digital Morph, Groliers Encyclopedia, Aldus Gallery Effects, Kia's power tools, Aldus Photo Styles, Composer, and much more!**
- ***Monitor not included***

$1299
w/ad exp. 5/29



GREEN PC

PENTIUM PCI 90MHz Machine

- **INTEL Pentium PCI 90 MHz Machine**
- **PCI Controller**
- **8MB RAM**
- **3.5" Floppy Drive**
- **540MB Hard Drive**
- **Diamond Stealth 64 PCI w/2MB**
- **101 Keyboard & Mouse**
- **Special Software Bundle**
- **MS-DOS 6.22, Windows 3.11, & Mouse**
- **On-Site Service**
- **Free Classes**
- ***Monitor not included***

$1999
w/ad exp. 5/29

CREATIVE

We carry the complete line of Creative Labs Multimedia Products

Take Me Home Now!

Financing Available - 90 days Same as Cash

Canon

Bubble Jet 200ex

Why buy the old Bubble Jet 200e from a chain store, when you can buy the 200ex at Winners Circle for a lower price. Faster & Better!

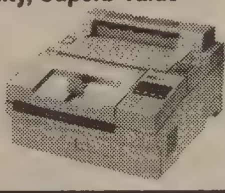
$239
w/ad exp. 5/29/95

DEC Laser Printer

Superior Quality, Superb Value

- 6PPM Speed
- 300dpi Quality
- Adobe PS Level 2
- PCL 5
- 34 Residend Fonts

$699



The Top Rated Multimedia pentium™ PROCESSOR Notebook

- PCMCIA Type II & III
- 32-Bit VESA Local Bus
- Removable 345MB Hard Drive
- Active Matrix Color
- Full Sound

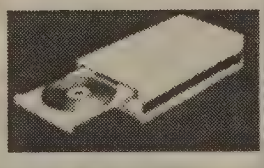
Pentium
60MHz $3199
90MHz Now Available!

Amiga Computers are Alive & Well at Winners Circle

See NewTek Video Flyer!

PCMCIA PORTABLE CD-ROM

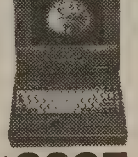
PORTABLE CD-ROM with Interface Card



$399

Best Multimedia Notebook

- 10.3" Dual Scan Color
- 486DX4-100MHz
- 4MB RAM expandable
- PCMCIA Type 3 Slots
- 345MB Removable Hard Drive
- 32-Bit Local Bus
- Sound System
- Nickel-Hydride Battery



$2095

FEATURING TOP RATED SERVICE

- **Friendly, Knowledgeable Staff • Full Time Tech Support**
- **In-House Authorized Repairs • Free Public Domain Software • Free Training**

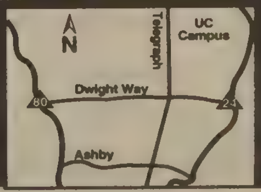
PRODUCT SELECTION

- **Top-Rated Major Brand Computers and Printers • CD-ROM • Tape Backup**
- **Laptop Computers • Modems and Fax Machines • Large Selection of Software & Accessories**
- **Color Desktop Publishing**

WINNERS CIRCLE SYSTEMS

2618 Telegraph Ave. • Berkeley, California • 510-845-4814 • Fax 510-845-2400
Hours: Monday Thru Saturday 9:30-6

Not responsible for typographical errors



Robert Austin
Computer
Shows

The Bay Area's
Largest Computer Shows

Oakland
Convention Center
Saturday May 6, 1995
Broadway at 10th Street, Oakland
SAVE $2 On Admission
Present this coupon at time of ticket purchase and receive $2 off regular adm price. Limit one coupon per ticket purchased

The Cow Palace
Saturday May 27, 1995
Corner of Geneva & Santos, Daly City
SAVE $2 On Admission
Present this coupon at time of ticket purchase and receive $2 off regular adm price. Limit one coupon per ticket purchased

Oakland
Convention Center
Saturday June 10, 1995
Broadway at 10th Street, Oakland
SAVE $2 On Admission
Present this coupon at time of ticket purchase and receive $2 off regular adm price. Limit one coupon per ticket purchased

The Cow Palace
Saturday June 24, 1995
Corner of Geneva & Santos, Daly City
SAVE $2 On Admission
Present this coupon at time of ticket purchase and receive $2 off regular adm price. Limit one coupon per ticket purchased

- *Liberal warranties and exchange policies on most products.*
- *Hundreds of experts available to answer your questions.*
- *Now over 150 booths of products. Shop, Compare and Save!*

All shows open from 10am to 4pm
Regular admission $6
Kids 12 & under are always free!

Computer Of The Month:

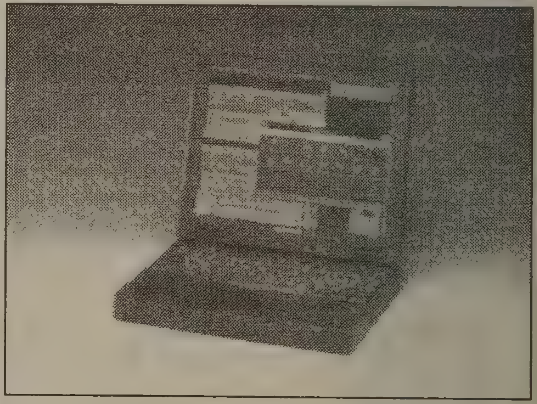
Gateway 2000 Liberty

Portable computing has progressed to the point where most of the manufacturers are getting their designs correct, right from the start. One of the companies I can always count on to come up with innovative and exciting new products is the mail order firm Gateway 2000. This month, I examine a new line of portables called Liberty. These computers—I use the plural because the Liberty line comes in a wide range of configurations designed to give you just what you want—come in a small but powerful package. The unit weighs just over 4lbs. including battery and measures a sleek 10" x 8" x 1.6". Despite the small size, the color display measures a huge 10.4" diagonally.

Gateway does not sacrifice features to get to this small package, it just uses miniaturized components. The only change they have made to bring the weight down is to eliminate a built-in floppy drive. More and more, I find less and less need for a built-in floppy drive. An external floppy drive ($79) is available as an accessory. It connects through the parallel port and the port knows whether you have connected the drive or a printer.

The Liberty line comes in configurations with CPUs up to DX4-100s; hard drives are available in capacities up to 720MB. The hard drive is removable, which makes both security and upgrading simple. Just remove the drive and the machine automatically goes into suspend mode so no data can be lost. Extra drives, of course are available. As part of their energy conservation efforts, Gateway is now shipping portables with 8MB of memory. When running Windows, less battery power is used if there is more memory because there is less need to call on the hard disk for files. Accordingly, memory can be increased to either 12MB ($249) or 24MB ($899).

Gateway has included all of the features expected from portables, but also provides a few surprises. In addition to a parallel and serial port, there is an infrared port that makes transferring files really simple. Just connect the infrared desktop module to the serial port of another computer and point the Liberty towards this module and files can be transferred just as if the machines were connected by hardwires. The needed software comes with the Liberty.



The keyboard of the Liberty is as good as any portable gets, with a built-in EZ Point pointing device. These eraser-like pointing devices are the way to go. While I still prefer a real mouse, when on-the-go this gadget beats any of the other arrangements I have seen. If you want to use a real keyboard, simply plug into the PS/2 port on the back of the Liberty. If you want to use a mouse, you can either plug into the PS/2 port or the serial port.

The nickel metal hydride battery pack should power your system for up to four hours if you maximize battery conservation. Recharges take about an hour. Many of the packages Gateway 2000 sells come with an

continued on page 252

LOWEST PRICE GUARANTEED!

ALL SYSTEMS 2 YEAR LABOR 1 YEAR PARTS WARRANTY

COMPARE OUR QUALITY! THEN COMPARE OUR PRICES!

PENTIUM™ 75MHZ
MULTIMEDIA SYSTEM

- INTEL Pentium™ 75 MHZ w/Cooling Fan
- SIS M/B w/4 PCI, & 4 ISA Slots
- 256K of Write Back Cache
- 8 MB of RAM, 72 Pins, Exp to 128MB
- 1.2 MB 5 1/4" & 1.44 MB 3 1/2" Floppy Drives
- 850 MB WD IDE Hard Drive w/Cache
- 64 Bit Diamond Stealth 64 w/2 MB
- Enhanced IDE Cont. 2FD/4HD & 2S/1P/1G (Windows Accelerator, Sup to 16.7 Mil Colors)
- 17" Shamrock NI .28 Screen Display (1280x1024)
- Full Tower Case w/230W P/S & Dig. Display
- 101 Keytronic Keyboard
- FREE Microsoft Mouse & Pad
- Teac 4X CD-ROM 195ms/600KB
- Sound Blaster 16 16 Bit Sound Card
- MS CD PACK
  - Encarta
  - Works
  - Money
  - And Much More
- 14.400 Fax Modem w/Voice

WITH 80 WATT SPEAKERS

SPECIAL

75MHZ
$2249

PRO-MULTIMEDIA
486DX2/DX4

- INTEL 486DX2/DX4 Processor w/Heat Sink & Fan
- Built-In 487 Math Co-Processor
- Green 486 MB w/P24T, 3 VLB & Zif Socket
- 256K of Fast Write Back Cache
- 4 MB of RAM (Exp to 64MB)
- Teac 1.2 MB 5 1/4" & 1.44 MB 3 1/2" Floppy Drives
- 540 MB IDE Hard Drive with Cache
- 32 Bit Spider 256K Cache VLB w/1 MB exp to 2 MB Video Card
- 32 Bit Enhanced Controller w/2S/1P/1G Ports
- 15" ExView Dig. NI .28 SVGA (1280x1024) Monitor
- Mid-Tower w/250W Power Supply
- FREE Z-NIX 3 Button Hi-Resolution Mouse w/Pad
- Sony CD-ROM 300KB DS/250ms
- Sound Blaster 16 MCD Sound Card
- Amplified Speakers 80 Watts
- Music Software Bundles
- MICROSOFT CD PACK
  - Encarta
  - Money
  - Works
- And Much More!

WITH 80 WATT SPEAKERS

AMD 486DX-2 80MHz $1555

SPECIAL

66MHz $1365 100MHz $1465

ADVANCED VLB 486 DX2/DX4
& MULTIMEDIA SYSTEM

- INTEL 486DX2/DX4 Processor w/Heat Sink & Fan
- Built-In 487 Math Co-Processor
- Green 486MB w/P24T, 3 VLB & ZIF Socket
- 256K of Fast Write Back Cache
- 8 MB of RAM (exp. to 64 MB)
- Teac 1.2 MB 5 1/4" & 1.44 MB 3 1/2" Floppy Drives
- 850 MB IDE Hard Drive with Cache
- 64 Bit Spider-64 Bit 64 VLB w/2MB exp to 4 MB Video Card
- 32 Bit Enhanced IDE Controller w/2S, 1P, 1G Ports
- 101 Keytronics Enhanced Keyboard
- 15" Optiquest 2000DC NI .27 SVGA (1280x1024) Monitor
- Mid-Tower w/250W Power Supply
- Microsoft Hi-Resolution Mouse w/Pad
- Teac Quad Speed CD-ROM
- Sound Blaster 16 MCD Sound Card
- Amplified Speakers 80 Watts
- Music Software Bundles
- MICROSOFT CD PACK
  - Encarta
  - Money
  - Works

And Much More!

WITH 80 WATT SPEAKERS

AMD 486DX-2 80MHz $1855

SPECIAL

66MHz $1825 100MHz $1925

PENTIUM™ 66 MHz
MULTIMEDIA SYSTEM

- INTEL Pentium™ 66 MHz Processor w/Math Co-Pro w/Heat Sink & Fan
- New AMI Flash Bios for easy upgrade
- Green M/B w/4 PCI & 4 ISA Slots
- 8 MB RAM Exp to 128MB/ 256K exp to 512K
- Teac 1.2MB 5 1/4" & 1.44 MB 3 1/2" Floppy Drives
- 850 MB IDE Hard Drive w/Cache
- Built-In PCI Enhanced IDE I/O
- 64 Diamond Stealth 64 w/2 MB
- 15" Sony SF Monitor .25dpi (1280x1024)
- Full Tower Case w/230W P/S & Digital Display
- 101 Keytronics Pro-Enhance Keyboard
- FREE Microsoft Mouse & Pad
- Teac 4X CD-ROM 195ms/600kb
- Sound Blaster 16 MCD Sound Card
- 80 Watt Speakers
- MICROSOFT CD PACK w/Encarta, Money, Works, Etc.

WITH 14.400 FAX/MODEM W/VOICE MAIL

WITH QUAD SPEED CD-ROM & 80 WATT SPEAKERS

SPECIAL

$2095

PENTIUM™ 90/100
MULTIMEDIA SYSTEM

- INTEL 90/100 MHz CPU & Math Cop w/Fan
- AMI Flash Bios for Easy Upgrade
- AZUS MB w/3 PCI & 5 ISA
- 512K Write Back Cache
- 16 MB of RAM (72 Pins Simm) Exp to 128 MB
- Teac 1.2 5 1/4" & 1.44 3 1/2" F/Drives
- Conner 1 GB SCSI II H/Drive w/Cache
- 64 Bit Adaptec 2940 SCSI Controller
- 64 Bit Diamond Stealth 64 w/2 MB
- 17" Mag DX-17 .28 Dig Cont & LCD Monitor (1280x1024)
- Full Tower Case w/300W P/S & Dig Display
- 124 Keys Focus KeyPro 8000 Keyboard
- Free Mouse 3 Button & Pad
- Dual Cooling Fan
- Toshiba 4X SCSI CD-ROM & Sound Blaster 16 SCSI 2 Sound Card
- Speakers 80W -Microsoft CD Bundle, Encarta, Works & More

WITH 28.800 FAX/MODEM

WITH QUAD SPEED CD-ROM & 80 WATT SPEAKERS

SPECIAL

90MHz $3655 100MHz $3800

PENTIUM™ 90 MHz
MULTIMEDIA SYSTEM

- INTEL Pentium™ 90 w/Cooling Fan
- Asus M/B w/4 PCI, 4 ISA & Zif Socket
- 8 MB of Ram w/512K
- Teac 1.2 & 1.4 F/Drive
- Connor 1.2 GB Hard Drive
- 64 Bit Diamond Stealth 64 w/2 MB DRAM
- Built-In M/B w/PCI Enhance IDE I/O
- Med-Tower w/250W & Dig Display
- 101 Keytronic Keyboard
- Microsoft Mouse & Pad
- 15" ExView NI .28 SVGA Monitor (1280x1024)
- Sony 2X CD-ROM
- Sound Blaster 16 MCD Sound Card
- 80W Speakers
- Microsoft CD Bundles, Encarta, Works & More

WITH 14.400 FAX/MODEM W/VOICE MAIL

SPECIAL

$2395

QUAD SCSI MULTIMEDIA KIT

- Toshiba 4X SCSI CD-ROM
- Sound Blaster SCSI II
- 80 Watt Speakers

$445

FREE Encyclopedia

QUAD MULTIMEDIA KIT

- Teac CD-ROM
- Sound Blaster 16 MCD
- 80 Watt Speakers

$295

FREE Encyclopedia

DOUBLE SPEED MULTIMEDIA KIT

- Panasonic 562 CD-ROM
- Media-Magic 16 Sound Card
- 80 Watt Speakers

$235

FREE Encyclopedia

MEMORY

256K x 9 SIMM	$7	2 MB 72 Pin SIMMs	75
1 MB x 3 SIMM	36	4 MB 72 Pin SIMMs	149
4 MB x 8 SIMM	119	8 MB 72 Pin SIMMs	289
4 MB x 9 SIMM	129	16 MB 72 Pin SIMMs	499
1 MB 72 Pin SIMMs	39		

MONITORS

14" ExView NI .28 Dig Cont	$199	15" OptiQuest 2000DX NI .27	$369
15" ExView NI .28 Dig Cont	289	15" Mag DX15-F NI .28.	330
17" ExView NI .28 On Screen Cont	549	17" Mag DX17-F NI .26.	599

SVGA CARDS

Spider VLB w/1 MB Card	$79	Spider Pro VLB w/1 MB + IDE I/O	96
Spider VLB Plus w/1 MB Card	87	Spider 64 VLB/PCI 2MB Exp to 4 MB	159
Spider 256K w/1 MB	99	Spider Tarantula VLB/PCI 2 MB Exp to 4 MB	259

Energy EPA POLLUTION PREVENTER

Pentium is a trademark of Intel Corp

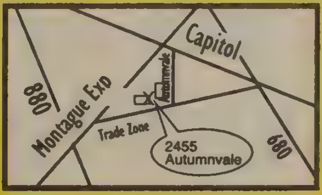
Σ SIGMA-COM
COMPUTER SALES AND SERVICE

2455 AUTUMNVALE DRIVE, STE. #C
(on Side of 2471 Autumnvale)
SAN JOSE, CA 95131

OPEN MON-FRI 10AM-7PM
SAT: 11AM-6PM

Ph: 408-942-4881
TECH: 408-942-4884
FAX: 408-942-4882

Prices Subject To Change w/o Notice.
Prices Reflect a Cash Discount.
Not Responsible for Typographic Errors.



TELECOMMUTING • BY ROBERT MOSKOWITZ

Telecommuting Conference Points The Way To The Future

Global Village Conference, Vienna, February 1995

On February 6–10, 1995, an extremely exciting and important world conference on telecommuting and its implications took place in and around Vienna, Austria. The second such conference sponsored by the Globally Integrated Village Environment project, this one was far larger than the first, and brought together network planners, city planners, Internet practitioners, corporate executives, and political leaders in a two-tiered conversation that consisted of public presentations augmented by private negotiations and project planning.

Before and after the conference, experts and political leaders got together to discuss the possibilities for establishing new mental models for living and working in Vienna's rapidly expanded northern districts, as well as in smaller towns elsewhere in Austria and the world.

Based on my own experiences at the conference, and my conversations with conference organizer Franz Nahrada, here's a brief explanation and summary of what happened during this exciting week:

What do the data superhighway, the worldwide environmental sustainability movement, and the call for a new community and entrepreneurial spirit have in common? They reflect a social change unprecedented in history, a situation where the power of technology—now expressed as emerging global networks—need not be used to draw borders, consume resources, or create islands of wealth and seas of poverty. Instead, this new technology can become a beneficial force that empowers individuals and whole communities to better manage their lives.

Nahrada and his team designed the "Global Village" Conference as a meeting place for an international community that can support and implement this vision—not as an idealistic Sunday-morning dream, but as a host of very concrete opportunities and action possibilities for politicians, businesses, and individuals to pursue.

One theme that emerged from the conference: When jobs are lost in the Western nations to ongoing automation and newly emerging data processing industries in the third world, millions of people in Europe and the USA will be in need of tools, information, and new mental models for how to take their lives into their own hands. If we are to avoid massive social unrest, we must find ways to create entrepreneurial spirit, build community economies, expand work opportunities, make more efficient use of ecological resources, and so forth. Government can almost certainly use the power of these new global electronic networks to monitor and fine-tune the consequences of the tendencies toward economic and social globalization.

Another emergent theme: There is a large business opportunity in this process, too. Corporations can prosper by delivering information and tools that, instead of expanding the old consumer pattern into virtual reality, smart drugs, and more readily available entertainment, make people awaken to the endless possibilities of nurturing their local environment through teamwork and cooperation.

There is a market need for "prosumer" industries that deliver new paradigm products such as increased self-reliance, an "empowered" home, automated energy and food production, and a strong alternative to today's outdated, overly expensive health care system. Tofflers' "Third Wave" is still on the horizon, and some of those who have been heralding it for ten years or more have inadvertently fallen back into old and obsolete patterns. But now is the time for a new and much more powerful rededication to this view of the world.

The conference also made clear how individuals and their communities will be the primary force that makes this change happen. Individuals and small communities will be among the first to discover the many ways to use global networks for taking charge of their lives—through access to better information and resources, through telecommuting as a way to reduce wasted time and energy, and through greater connectivity that eliminates a great measure of today's isolation and ignorance. It is more important than ever for individuals to learn from each other, take each other as examples, and understand that we can

continued on page 54

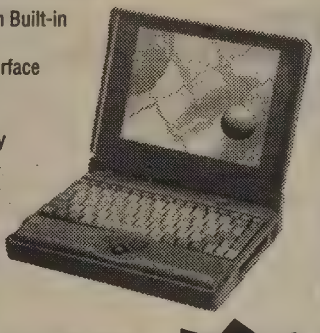
Individuals and small communities will be among the first to discover the many ways to use global networks in order to take charge of their lives.

WE CARRY THE LATEST IN QUALITY MULTIMEDIA NOTEBOOKS AT GREAT PRICES!

Model 9800

FASTEST PENTIUM EVER 100-MHz

- Intel **Pentium-100MHz** CPU with 256K Cache
- **8MB RAM**, expandable to 16/24/40MB
- **340MB** Removable Hard Drive, upgradable to 520MB & 810MB
- 32-Bit VESA Local Bus w/1MB
- 1.44 Floppy Drive
- PCMCIA Type II and Type III Slots
- Complete 16-Bit Audio System, with Built-in Speaker and Microphone
- **Two Serial Ports**, plus multiple Interface Ports
- Built in Trackball
- NiMH Battery w/Hot Swap Capability
- Power Management
- 11.4"x8.6"x1.9"
- Weight 6.6Lbs.



Dual Color Scan $2890

Active Color $3690

Biggest Screen on the Market!

Model 8500

Big Screen 11.3" Slim Size!

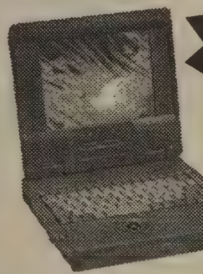
- 486DX2-66 CPU upgradable to DX4-1100
- **11.3" Dual Scan Color Display**
- **16-Bit Stereo Sound**
- 4MB RAM, expandable to 8/12/20/36MB by standard DIMM's
- **340MB** Removable Hard Drive, upgradable to 520MB & 810MB
- 32-Bit VESA Local Bus w/1MB
- 2 PCMCIA Type II or 1 Type III Slots
- Removable Floppy Drive for Second Battery
- TrackPoint
- Slim size 12"x9.7"x1.7"
- Only 5.8Lbs.

Plus Much More!

$2200

Model 7600/3600

Lowest Priced Pentium!



- Intel **Pentium 90/66/60 MHz** CPU, **64-Bit** superscaler technology, **thermostat-control cooling fan**
- 256K Cache (90MHz)
- **16-Bit Stereo Sound**, 2 Stereo Speakers & Microphone **(Record, compress, store and playback voice, sound & music to disk.)** Sound Blaster & Windows Sound System compatible
- **32-bit VESA Local Bus Video with Windows Accelerator**, 1MB VRAM
- **32-bit Intel Local Bus IDE** (increase transfer rate by 45%)
- **Removable Hard Drive** 250MB (340, 540, 810 Optional)
- **8MB RAM** (User upgradable to 16,24,**40MB**)
- **PCMCIA** one **Type III** or one **Type II**
- 1.44 MB Floppy Drive
- 10.3" Dual Scan/Active Color Display (supports 1024x768 256 colors on ext. Monitor)
- Extra large Built-in 25mm front-center Trackball
- **46 Watt** High Capacity **NiMH Battery**, Quick Charge 2 hr
- Ports for high-speed serial, enhanced parallel, keyboard, monitor & **VLB Docking Station**
- Deluxe Carrying Case & AC adapter

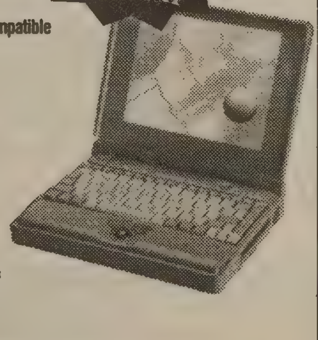
8MB RAM 90 MHz

90MHz, 256K, Dual Scan Color $2620
90MHz, 256K, Active Color.......................$3220
60/66MHz, Dual Scan Color $2400/2450
60/66MHz, Active Color....................$3150/3200

Model 9400

DUAL BATTERY 10.3" DISPLAY

- Intel 486DX-33 MHz CPU (Upgradable to **DX2-66, DX4-75/100**)
- **128K Cache**
- Built-in **Audio, MIC, Speaker, Sound Blaster & Windows compatible**
- 10.3" Display
- **32-bit VESA Local Bus Video**
- **1MB Video RAM with Win Accelerator**
- **PCMCIA III & II**
- 4MB RAM (exp. to 8/12/16/20/36MB)
- 1.44MB Floppy Drive
- **Removable 250MB** Hard Drive (340MB/540/810MB Optional)
- Built-in **front-center 25mm Trackball**
- **2 NiMH batteries**, Quick Charge 2hrs. (w/ hot swap)
- Ports for serial, parallel, external, monitor, keyboard/mouse & VLB Docking Station
- Carrying Case, AC Adapter
- Weight **6.6lbs**



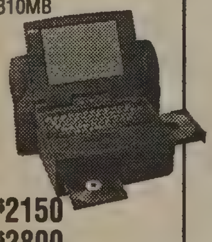
Mono 64GS..............ON SALE	~~$1845~~	**$1449**
Dual Scan	~~$2335~~	**$1849**
Active Color...........................	~~$3315~~	**$2500**

Model 9500

Internal CD-ROM & TV Tuner Optional

- 486DX2-66 MHz CPU (DX4-100, optional)
- 256K Cache (512K, 1MB optional)
- 16-bit Stereo Sound
- 32-Bit VESA Local Bus Video
- 4MB RAM expandable with standard DIMMs up to 64MB
- **340MB** Removable Hard Drive, upgradable to 520MB & 810MB
- 10.3" Dual Scan or 9.5" Active Matrix Color Display
- **4 PCMCIA** Type II or 2 Type III Slots (Maximum)
- Trackpoint pointing device
- 2 High Speed Serial Ports, EPP, Game, & MIDI Ports
- NiMH battery (2nd & 3rd Battery Optional)
- Weight 7.5 Lbs

Plus Much More!



Dual Scan Color $2150
Active Color.................................$2800

Low Price & Light Weight

Only 5 lbs, with Room to Grow!

- 486SX-33, Upgradable to 486 DX2 or DX4
- VLB with 512K Cache
- 4MB expandable to 8, 12, or 20MB
- 260MB Hard Drive, Upgradable
- 9.5" Display
- PCMCIA type II or III Slot
- 1.44 Floppy Drive
- Built-in Trackball
- NiMH Battery
- Only 5 lbs, plus small size 10.4"x8"x1.8"

$1235 MONO

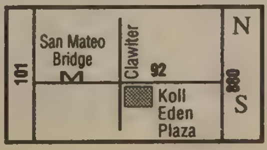
$1695 DUAL SCAN

PCMCIA/Parallel Port CD-ROM Starting at $260

CYPRESS CYPRESS CYPRESS CYPRESS

CYPRESS COMPUTER INC.

26120 Eden Landing Road, Suite 6 ❖ Koll Eden Plaza, Hayward, CA 94545
Tel: 510-786-9106 ❖ Fax: 510-786-9553
1-800-728-6688
Hours: Monday-Friday 9-6 Saturday 9-12:30 & 1:30-5



3 Years Labor & 1 Year Parts Warranty!

We Will Beat Any Advertised Price!

Fast 48 Hour Turnaround Service Guaranteed

If we can't meet our deadline, we'll give you a free loaner.

Solid Reputation

Our happy customers include: The US Postal Services, MIT, Stanford University, EBMUD, Price Waterhouse, Sage Instruments, New York Life, Mervyn's, and many more!

We Upgrade And Repair All Notebooks and Laptops Makes and Models. Over 6 years Experience.

Leasing and 0% Financing Available

Not responsible for typographical errors. Prices subject to change without notice.

Symphony COMPUTERS™

Business Leasing Available

FULLY FEATURED

NOT THE

INFINITY-2000™

ACTION G M1 SERIES

- ▲ ACTION GREEN **Turbo Mainboard EPA "Energy Star"** Power Management
- ▲ Zif Socket (zero insertion force)
- ▲ Upgradable to a Pentium™ OverDrive™ Processor
- ▲ 486 Processor
- ▲ **256KB** Write Back Static Cache
- ▲ **4MB** 72-Pin RAM Installed **Ultra High Speed 60ns**
- ▲ NEC 1.44MB 3.5" Drive
- ▲ **540MB** IDE Hard Drive
- ▲ 32-Bit VLB IDE w/2S, 1P, 1G Port
- ▲ **Windows Accelerator** (32 VLB) Video Card w/1MB Exp. 2MB
- ▲ 14" **Non-Interlaced** SVGA Color Monitor .28 (Edge to Edge)
- ▲ 101 Enhnaced Keyboard
- ▲ DELUXE Mini Tower w/**UL 230W** Power Supply

486DX4-100 (Intel)	$1058
486DX4-100 (AMD)	$1018
486DX2-80 (AMD)	$948
486DX2-80 (Cyrix)	$938
486DX2-66 (Intel)	$928
486DX2-66 (AMD)	$898
486DX2-50 (Cyrix)	$878
486DX-40 (AMD)	$878

INFINITY-2000™

STARMEDIA SERIES

- ▲ ACTION GREEN **Turbo Mainboard EPA "Energy Star"** Power Management
- ▲ Zif Socket (Zero Insertion Force)
- ▲ Upgradable to a Pentium™ OverDrive™ Processor
- ▲ 486 Processor
- ▲ **256KB** Write Back Static Cache
- ▲ **4MB** RAM (72-Pin) **Ultra High Speed 60NS**
- ▲ NEC 1.4MB 3.5" Drive
- ▲ **540MB** IDE Hard Drive
- ▲ 32-Bit IDE w/2S, 1P, 1G port
- ▲ Windows Accelerator 32-VLB Video Card w/ 1MB (exp. to 2MB)
- ▲ 14" **Non-Interlaced** SVGA Color Monitor, .28 (Edge to Edge) **"EPA Energy Star"**
- ▲ 101 Enhnaced Keyboard
- ▲ **Enhanced Medium Tower w/UL 230W** Power Supply

STARMEDIA (MULTIMEDIA)

- **Creative Labs Sound Blaster 16 Sound card**
- Sony Double Speed CD-ROM Drive
- *New* Lasonic® 100W Hi-Fi Amplified Surround Sound Speakers
- *New* **Microsoft Home CD Package:**
  - **Microsoft Encarta '95 • Microsoft Works**
  - **Microsoft Money • Microsoft Enterainment Pak**
- Free Mouse w/ Mouse Pad

486DX4-100 (Intel)	$1328
486DX4-100 (AMD)	$1288
486DX2-80 (AMD)	$1218
486DX2-66 (Intel)	$1198
486DX2-66 (AMD)	$1168

INFINITY-2000™

GREEN PYTHON™ SERIES

- ▲ **GREEN PYTHON™** 486 Advanced Mainboard
- ▲ **EPA "ENERGY-STAR"** Power Management
- ▲ Upgradable to a Pentium™ Over Drive™ Processor or 486DX4-100MHz
- ▲ 486 Processor
- ▲ **ZIF SOCKET** (zero insertion force)
- ▲ **256KB** Write Back Static Cache
- ▲ **8MB** (72 pin) RAM Installed **Ultra High Speed 60NS**
- ▲ **DIAMOND STEALTH 64 (VLB) w/2MB RAM** Screaming **64 Bit** Graphics Accelerator, 16 Million True Colors
- ▲ **ENHANCED IDE (VLB) CONTROLLER W/ IO PORTS**
- ▲ **NEC 1.2 & 1.44 Drives**
- ▲ **AWARD WINNING BYTE BEST VALUE KFC 15"** Non-Interlaced .28 Monitor (1280X1024) **LCD Digital Control** & EPA "Energy Star"
- ▲ **850MB ENHANCED IDE** Hard Drive
- ▲ **Fujitsu** 101 Enhanced Keyboard
- ▲ **Ultra** Medium Tower Case w/ 230W (UL) Power Supply

486DX4-100 (Intel)	$1628
486DX4-100 (AMD)	$1588
486DX2-80 (AMD)	$1518
486DX2-66 (Intel)	$1498

INFINITY-2000™

GREEN PYTHON™ M2 PRO+

- ▲ **GREEN PYTHON™** 486 Advanced Mainboard
- ▲ **EPA "ENERGY-STAR"** Power Management
- ▲ Upgradable to a Pentium Over Drive™ Processor or 486DX4-100MHz
- ▲ 486 Processor
- ▲ ZIF SOCKET (zero insertion force)
- ▲ **256KB** Write Back Static Cache
- ▲ **8MB RAM** (72-Pin) installed **Ultra Fast 60NS**
- ▲ **DIAMOND STEALTH 64 (VLB) w/ 2MB RAM** Screaming 64 Bit Graphics Accelerator, 16 Million True Colors
- ▲ **NEC 1.2 & 1.44 Drives**
- ▲ **AWARD WINNING BYTE BEST VALUE KFC 15"** Non-interlaced .28 Monitor (1280X1024) **Digital Control** & EPA "Energy Star"
- ▲ **850MB ENHANCED IDE** Hard Drive
- ▲ **Enhanced IDE VLB** Controller with IO Ports
- ▲ **Fujitsu** 101 Enhanced Keyboard
- ▲ Ultra Medium Tower Case **w/ 230W (UL)** Power Supply

Free 14.4 Fax Modem Limited Offer

M2 PRO+ PACKAGE: (Multimedia)

- **Creative Labs Sound Blaster 16 Sound card**
- Teac Quad 4X speed CD-ROM (IDE)
- *New* Lasonic® 100W Hi-Fi Amplified Surround Sound Speakers
- *New* **Microsoft Home CD Package:**
  - **Microsoft Encarta '95 • Microsoft Works**
  - **Microsoft Money • Microsoft Enterainment Pak**
- Free Microsoft Mouse w/ Mouse Pad

486DX4-100 (Intel)	$2028
486DX4-100 (AMD)	$1988
486DX2-80 (AMD)	$1918
486DX2-66 (Intel)	$1898

INFINITY-2000™ Authorized Dealers

Los Angeles • Riverside • San Diego • Modesto • **Santa Clara**

Notebooks on Sale now Call

Symphony COMPUTERS™

Montague
101
De La Cruz
Aldo
Trimble
Edwards
880
N

3460 Edward Ave.
Santa Clara, CA 95054

Tel: (408) 980-8325

Sales Ext. 24, 25, 26 or 29

Fax: (408) 980-8327

E-Mail Sales: Symcomp@Aol.Com

MON-FRI: 9:00AM-6:30PM
SAT: 11:00AM-5:00PM (Sales)
SUN: 11:00AM-4:00PM (Sales)

Southern California Location:
9620 E. Las Tunas Drive, Temple City, CA 91780

MasterCard VISA AMERICAN EXPRESS DISCOVER

No Surcharge

*Must Call Store For Complete Details

Prices, Specifications, Terms & Conditions are subject to change without notice. Not responsible for typographical errors. Prices good with this ad only, and must be shown at the time of purchase

INFINITY-2000™

PENMEDIA 9

- ▲ **Intel *New* Triton Chip Set Pentium Motherboard**
- ▲ Intel Pentium™ chip 75/90/100MHz Processor
- ▲ Zif Socket (zero insertion force)
- ▲ **256KB** Write Back Cache
- ▲ **16MB** (72-Pin) RAM up to 128MB **Ultra High Speed 60NS**
- ▲ 1.44MB 3.5" Floppy Drive
- ▲ **Conner** 1.0GB SCSI-2 Hard Drive
- ▲ Adaptec 2940 PCI SCSI Controller
- ▲ 2 Hi-Speed (16550 fast UARTS) Serials & 1 Enhanced Parallel
- ▲ NEC 1.44MB 3.5" Drive
- ▲ **Diamond Stealth 64 PCI w/2MB VRAM**
- ▲ **AWARD WINNING "BYTE" BEST VALUE KFC 17" .26 Flat Screen LCD Digital Control** "Energy Star" Monitor
- ▲ **Fujitsu** 101 Enhanced Keyboard
- ▲ Enhanced Full Tower Case w/ 265W UL Power Supply

Free 14.4 Fax Modem Limited Offer

PENMEDIA 9 MULTIMEDIA PACKAGE:

- Creative Labs Sound Blaster 16 Sound card
- Quad 4X speed CD-ROM (IDE)
- *New* **Lasonic® 100W Hi-Fi Amplified Surround Sound Speakers**
- *New* **Microsoft Home CD Package:**
  - **Microsoft Encarta '95 • Microsoft Works**
  - **Microsoft Money • Microsoft Entertainment Pak**
- Free Microsoft Mouse w/ Mouse Pad
- **Free DOS 6.2 & Win 3.11 w/ Manuals & Disks**

Pentium 100	$3708
Pentium 90	$3558
Pentium 75	$3358

INFINITY-2000™

PENMEDIA 9 SE

- ▲ **Intel *New* Triton Chip Set Pentium Motherboard**
- ▲ Intel Pentium™ Chip 75/90/100MHz Processor
- ▲ Zif Socket (Zero Insertion Force)
- ▲ **256KB** Write Back Cache
- ▲ **32MB (72-Pin) RAM up to 128MB Ultra High Speed 60NS**
- ▲ NEC 1.44MB 3.5" Floppy Drive
- ▲ **Fujitsu 1.0GB FAST & WIDE SCSI** 9MS Hard Drive
- ▲ **Adaptec 2940W FAST WIDE SCSI** Controller (20MB/Sec.)
- ▲ 2 Hi-Speed (16550 fast UARTS) Serials & 1 Enhanced Parallel
- ▲ **Diamond Stealth 64 PCI 2MB VRAM**
- ▲ **AWARD WINNING "BYTE" BEST VALUE KFC 17" .26 Flat Screen LCD Digital Control** "Energy Star" Monitor
- ▲ **Fujitsu** 101 Enhanced Keyboard
- ▲ ENHANCED Full Tower Case w/ 265W UL Power Supply

Free 14.4 Fax Modem Limited Offer

PENMEDIA 9 SE MULTIMEDIA PACKAGE:

- **Creative Labs Sound Blaster AWE 32 Sound card**
- *New* **Microsoft Home CD Package:**
  - **Microsoft Encarta '95 • Microsoft Works**
  - **Microsoft Money • Microsoft Entertainment Pak**
- Toshiba 4X Quad 3501B SCSI-2 CD ROM
- *New* **Lasonic® 100W Hi-Fi Amplified Surround Sound Speakers**
- Free Microsoft Mouse w/ Mouse Pad
- Free DOS 6.2 & Win 3.11 w/ Manuals & Disks

Pentium 100	$4488
Pentium 90	$4338
Pentium 75	$4138

INFINITY-2000™

STARMEDIA PRO SERIES

- ▲ Asus PCI/VLB 486 Motherboard
- ▲ **EPA "Energy Star"** Power Management
- ▲ Zif Socket (Zero Insertion Force)
- ▲ 486 Processor
- ▲ **256KB** Write Back Static Cache
- ▲ **8MB** (72-Pin) RAM Installed **High Speed 60NS**
- ▲ NEC 1.44 3.5" Drive
- ▲ **540MB IDE** Hard Drive
- ▲ **ENHANCED IDE PCI** Controller
- ▲ 2 Hi-Speed (16550 fast UARTS) Serials & 1 Enhanced Parallel
- ▲ **DIAMOND STEALTH 64** PCI **w/ 2MB RAM**, Screaming 64Bit Graphics Accelerator True 16 Million Colors
- ▲ **AWARD WINNING "BYTE" BEST VALUE KFC 15"** Non-Interlaced .28 Monitor (1280X1024) **LCD Digital Control & EPA "Energy Star"**
- ▲ 101 Enhanced Keyboard
- ▲ Enhanced Mid Tower Case w/UL **250W** PS

STARMEDIA PRO (Multimedia) PACKAGE

- Creative Labs Sound Blaster 16 Sound card
- Quad 4X speed CD-ROM (IDE)
- *New* **Lasonic® 100W Hi-Fi Amplified Surround Sound Speakers**
- *New* **Microsoft Home CD Package:**
  - **Microsoft Encarta '95 • Microsoft Works**
  - **Microsoft Money • Microsoft Entertainment Pak**
- Free Mouse w/ Mouse Pad

486DX4-100 (Intel)	$1828
486DX4-100 (AMD)	$1788
486DX2-80 (AMD)	$1718
486DX2-66 (Intel)	$1698
486DX2-66 (AMD)	$1668

Apply Now
Symphony credit card
take 4% OFF
on your first
computer system
purchase

UNDER PRICED
OTHER WAY AROUND

Easy Financing
90 DAYS
SAME AS
CASH*

Lifetime Labor &
3 Year Parts
Warranty*

INFINITY-2000™
ACTION G
4PV SERIES

- ▲ Asus PCI/VLB 486 Motherboard
- ▲ **EPA "Energy Star"** Power Management
- ▲ **Zif Socket** (zero insertion force)
- ▲ 486 Processor
- ▲ **256KB** Write Back Static Cache
- ▲ **8MB** (72 pin) RAM Installed **Ultra High Speed 60NS**
- ▲ NEC 1.44MB 3.5" Drive
- ▲ **540MB** IDE Hard Drive
- ▲ **Enhanced IDE** PCI Hard Drive
- ▲ 2 Hi-Speed (16550 fast UARTS) Serials & 1 Enhanced Parallel
- ▲ **DIAMOND STEALTH 64** PCI w/ **2MB** RAM, Screaming 64 Bit Graphics Accelerator True 16 Million Colors
- ▲ **NEC 1.44 Floppy Drive**
- ▲ **AWARD WINNING "BYTE" BEST VALUE KFC 15"** Non-interlaced .28 (1280X1024) **LCD Digital Control & EPA "Energy Star"**
- ▲ 101 Enhanced Keyboard
- ▲ Enhanced Medium Tower w/ 230W UL Listed Power Supply

486DX4-100 (Intel)	$1498
486DX4-100 (AMD)	$1458
486DX2-80 (AMD)	$1388
486DX2-66 (Intel)	$1368

INFINITY-2000™
ACTION P5
SERIES

- ▲ PCI 586 Pentium Motherboard
- ▲ Intel Pentium 586 Processor
- ▲ **ZIF Socket** (zero insertion force)
- ▲ 256K Cache; 512K for (75/90/100MHz systems)
- ▲ **8MB** RAM Installed **High Speed 60NS**
- ▲ NEC 1.44 Drive
- ▲ **850MB ENHANCED IDE** Hard Drive
- ▲ **Enhanced IDE PCI Drive** Controller
- ▲ **DIAMOND STEALTH 64** PCI w/ **2MB RAM** Screaming 64Bit Graphics Accelerator
- ▲ **AWARD WINNING "BYTE" BEST VALUE KFC 15"** Non-interlaced Monitor .28 **LCD Digital Control & EPA "Energy Star" (1280x1024)**
- ▲ 101 Enhanced Keyboard
- ▲ Enhanced Medium Tower w/UL 230W Power Supply

PENTIUM 100	$2108
PENTIUM 90	$1958
PENTIUM 75	$1758
PENTIUM 66	$1648
PENTIUM 60	$1598

INFINITY-2000™
PENMEDIA
POWER

- ▲ PCI 586 Pentium Motherboard
- ▲ **EPA "Energy Star"** Power Management
- ▲ Zif Socket (Zero Insertion Force)
- ▲ Intel Pentium Chip Processor
- ▲ **512KB** Write Back Static Cache
- ▲ **8MB** (72-Pin) up to 128MB **High Speed 60NS**
- ▲ NEC 1.44 3.5" Drive
- ▲ **1.08GB WD ENHANCED IDE HARD DRIVE**
- ▲ **ENHANCED IDE PCI** Controller
- ▲ **DIAMOND STEALTH 64** PCI w/ **2MB RAM**, Screaming 64Bit Graphics Accelerator True 16 Million Colors
- ▲ **AWARD WINNING BYTE BEST VALUE KFC 15"** Non-Interlaced Monitor .28 (1280X1024) **LCD Digital Control & EPA "Energy Star"**
- ▲ **Fujitsu** 101 Enhanced Keyboard
- ▲ Enhanced Full Tower Case w/UL **265W** PS

Free 14.4 Fax Modem
Limited Offer

PENMEDIA POWER PACKAGE:

- ▲ **Creative Labs Sound Blaster 16 Sound Card**
- ▲ **TEAC FAST QUAD 4X SPEED CD-ROM DRIVE (195MS, 600KB)** MPC, Photo CD Multisession & XA Compliant
- ▲ ***New* Lasonic® 100W Hi-Fi Amplified Surround Sound Speakers**
- ▲ **Free Microsoft mouse v 2.0 Ergonomic**
- ▲ ***New* Microsoft Home CD Package:**
  - **- Microsoft Encarta '95 • Microsoft Works**
  - **- Microsoft Money • Microsoft Entertainment Pak**
- ▲ **Free DOS 6.22 & Windows 3.11 w/Manuals & Disk**

PENTIUM 100	$2688
PENTIUM 90	$2538
PENTIUM 75	$2338

INFINITY-2000™
ADVANCED
9 SERIES

- ▲ **INTEL *New* TRITON Chipset PENTIUM** Motherboard
- ▲ Intel Pentium™ Chip 75/90/100MHz Processor
- ▲ Zif Socket (Zero Insertion Force)
- ▲ **256KB** Write Back Cache
- ▲ **16MB** (72-Pin) RAM up to 128MB **Ultra High Speed 60NS**
- ▲ NEC 1.44MB 3.5" Drive
- ▲ **Fujitsu 1.0GB FAST & WIDE SCSI** 9MS Hard Drive
- ▲ **Adaptec 2940W FAST WIDE SCSI** Controller (20MB/Sec.)
- ▲ 2 Hi-Speed (16550 fast UARTS) Serials & 1 Enhanced Parallel
- ▲ **DIAMOND STEALTH 64** PCI **w/ 2MB VRAM**, Screaming 64Bit Graphics Accelerator True 16 Million Colors
- ▲ **AWARD WINNING "BYTE" BEST VALUE KFC 17** .26 Flat Screen **LCD Digital Control** "Energy Star" Monitor
- ▲ **Fujitsu** 101 Enhanced Keyboard
- ▲ ENHANCED Full Tower Case w/ **265W** UL Power Supply
- ▲ **FREE** Microsoft Mouse V.20 Ergonomic w/Pad
- ▲ **FREE DOS 6.22 & WINDOWS 3.11 W/MANUALS & DISKS**

PENTIUM 100	$3538
PENTIUM 90	$3388
PENTIUM 75	$3188

MONTHLY SPECIALS

MONITORS
SONY • IDEK
NANAO • NEC
MAG • ViewSonic

14" Non-Interlaced .28 (EPA)	$208
15" KFC Non-Interlaced, .28dpi (1280) Digital Control & "Energy Star"	$348
17" Socos17" (1280X1024) .26 Digital/Energy Star EPA/"Low Radiation"	$588
17" KFC Flat Screen .26 Digital/Energy Star EPA/"Low Radiation"	$678
17" IDEK Vision Master MF-8617A 1600Res. .26	$768
20" Sony SE1 1600x1200 .30	$1828

PRINTERS

HP DeskJet 540 (New Arrival)	$289
HP DeskJet 560c (color)	$478

CASES
Limited Quantities Only

Deluxe Mini Tower w/230W PS	$36
Enhanced Mid Tower w/230W PS	$44
Deluxe MID Tower w/230W PS	$58
Deluxe Full Tower w/230W PS	$68
Enhanced Full Tower w/250W PS	$64

KEYBOARD

Fujitsu 101 Keyboard	$36
Focus 2001 Keyboard	$48
Infinity 2000 101 Keyboard	$15

MODEMS
w/Software

Digicom 19.2 Fax + Modem INT	$75
Digicom 19.2 Fax + Modem +Voice INT w/Terbo	$89
Digicom 28.8 Fax + Modem INT	$138

(Made in the USA • Milpitas • 5-Yr Warranty)

Zoltrix 14.4 Fax + Modem INT	$59
Zoltrix 14.4 w/ voice INT	$75
Zoltrix 28.8 Fax + Modem INT	$108
US Robotics 14.4 Fax + Modem INT	$108
US Robotics 28.8 Fax + Modem INT	$228

HARD DRIVES

Western Digital 425MB IDE 12ms	$178
Western Digital IDE 850MB	$258
Western Digital IDE 1.08GB	$378
All Large SCSI Hard Drives	$Call

MOUSE

Infinity-2000 Serial Mouse 400dpi	Sale! $5.99
Microspeed Trackball	$58
Microsoft mouse v 2.0 Ergonomic	$28

MOTHERBOARDS
w/o CPU

INFINITY 2000™

VLB 486 w/256KB w/Zif (Green "EPA")	$75
PCI 586 W/512K Cache (Green "EPA") 90/100MHz	$218

MICROSTAR

PCI/VLB 486 w/256KB (GREEN) w/IO	$149

SUPERMICRO

PCI/VLB586 w/512KB (Green EPA) **Made in USA**	$338

intel.

P5-90MHz w/256KB	$369

IBM

VLB 486SLC2-66MHz w/64KB+CPU+Math	$158

ASUS

PCI 586 w/256 w/New Intel Triton Chip Set MB	$298

CPU'S

intel. pentium PROCESSOR

Intel 486DX2-66MHz	$188
Intel 486DX4-100MHz	$268
Intel P5-60MHz	$288
Intel P5-66MHz	$328
Intel P5-90MHz	$578
Intel P5-100MHz	$758

ADVANCED MICRO DEVICE

AMD 486-40MHz	$148
AMD 486DX2-66MHz 3V	$149
AMD 486DX2-80MHz 3V	$178
AMD 486DX4-100MHz 3V	$238
MEMORY: 72-PIN 4/8/16MB	SCALL

SONY 15"/17" MONITOR SPECIAL

Sony 15sf 15"/17" • Trinitron • 0.25dp • Max Res. 1280X1024 at 76Hz • EPA Energy Star

$399/799
w/Factory Warranty

Prices listed are for cash purchase only. No credit cards please!. Not valid if upgrade from system.

Canon

BJC-600E Color	$498	BJ-C 400 Color	$358
BJC-4000 Color Inkjet	$359	BJ-200E	$228
BJC-600 Color InkJet	$398	BJ-230 110 Column	$388

SPECIAL COMBO PRICE!
SPECIAL MULTIMEDIA UPGRADE KITS

Microsoft HOME

Award winning Micresft Encarta multimedia encyclopedia includes:
- More than 26,000 fully updated articles
- More than 8 hours of sound
- More than 7,000 photos and illustration
- More than 100 animation and video clips

Microsoft Works 3.0 gives you the right tools for your business or persaal needs
- Work process • Speadsheet
- Database managemnet
- Charting and Illustration
- Financial Analysis

Microsoft Money is the eastest way to take control of your finance -
- Manage you bank account and investments, print checks, and track expenses
- Use it with leading tax packages.
- Innovative on the services are convenient and save time.

13 of the greatest games are all right here in one convenient pack. Hours of fun and stimulation are yours with:
- Taipei • Dr. Black Jack
- Tut's Tomb • Tetra Vex
- Tripeaks • TETRIS • Golf • FreeCell
- Rodent's Revenge • Chip's Challonge
- SidFree • JezzBall • Pipe Dream

- Sony CDU-33A 2x Speed CD-ROM
- Sound Blaster 16 Sound Card
- New Microsoft Home CD Titles
- Two Stereo Speakers
- Illustrated Installation Guide

$238
by: Impression®

- Teac Quad Speed CD-ROM Drive
- Sound Blaster 16 Sound Card
- New Microsoft Home CD Titles
- Two Stereo Speakers
- Illustrated Installation Guide

$338
by: Impression®

- Toshiba Quad Speed SCSI CD-ROM Drive
- Sound Blaster 16 SCSI-II Sound Card
- New Microsoft HOme CD Titles
- Two Stereo Speakers
- Illustrated Installation Guide

$438
by: Impression®

Telecommuting *continued from page 50*

use today's readily available technology to become and do almost whatever we want, if we choose to take the risk.

That's why the 1995 Global Village Conference was intentionally designed to examine new ways to change the patterns and the structures of today's political, economic, and social systems. Within the conference, organizers literally and metaphorically created an open, supportive space for this to happen.

The presentations and private meetings between representatives of those three systems have already led to various projects and cooperation and, in a broader sense, made headway toward a new definition of strategies for change in each of their fields. There will be more to say about this in coming months.

In the meantime, everyone interested in telecommuting, in using new technologies to create and support new and better lifestyles, can begin to anticipate the future, to consider what they want and what they don't want, and to begin working in their current situations to create new opportunities and discard old mental models and paradigms so as to facilitate the changes they'd like to make.

This conference, like every other conference on the topic, ought to be judged on the basis of how well it does what is most needed: that is, to spread far and wide a better understanding of the technological and social transitions we are presently undergoing.

Many ideas were born during this conference, including some based on exciting new developments we are already seeing in California and elsewhere in the world. Neighborhoods, small towns, and larger cities are developing experimental centers for a new type of self-reliant entrepreneurial and community lifestyle, centers where information to support this lifestyle is accumulated, made readily available, and demonstrated to all those with an interest in it. Plans are underway for larger, better integrated planning and information resource centers.

In the next few years, we may very well see a globally integrated neighborhood in Vienna tied closely together with a similar one in Los Angeles or San Francisco. The synergistic power of a cross-cultural exchange of information, ideas, and solutions to common problems was only hinted at by the 1995 Global Village Conference. When we make it happen on a larger scale, that power will certainly be a force to be reckoned with.

Online Ergonomics

Atelier 4 Architecture (A4A), an electronic assemblage of internationally known design professionals, is currently exploring the potential to help teleworkers by offering an online architectural service.

In order to extend their contacts and reputation within the world of telecommuting, A4A professionals are willing to consult on everything from small details—such as recommending the minimum setting of furniture, office supplies, and hardware necessary for a home

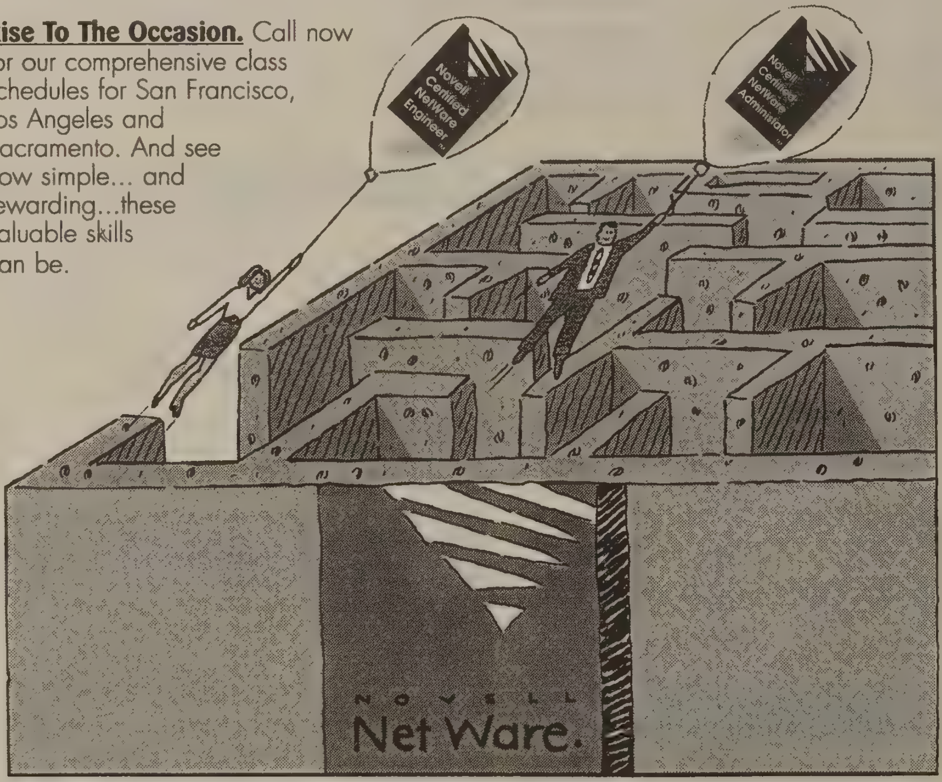
RAISE YOUR EXPECTATIONS.
...With Evernet's CNE Training.

Rise Above The Rest. Master your NetWare skills and get Novell certified in the process as a CNE or CNA (Certified NetWare Engineer or Administrator).

The Choice Is Yours. Evernet offers Novell training for all levels of network users, with your choice of method: instructor led or self-paced workbooks.

Watch Your Value Soar. With CNE certification, you can expect more professional mobility, more earning power, more respect. But don't just take our word for it - ask our graduates, who continue to fill 80% of our classes with student referrals!

Rise To The Occasion. Call now for our comprehensive class schedules for San Francisco, Los Angeles and Sacramento. And see how simple... and rewarding...these valuable skills can be.

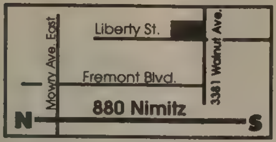

Novell Certified NetWare Engineer
Novell Certified NetWare Administrator
NOVELL
NetWare.

NIGHT CLASSES AVAILABLE

Novell Authorized Education Center

For Information And Registration call:
1-800-447-3658 • Local, call 415-764-1400

EVERNET
EDUCATION SERVICES
Los Angeles • San Francisco • Sacramento



Same Location Since 1979

COMP EXPRESS

(510) 794-9311

3381 Walnut Avenue
Fremont
M-F 9-6 pm • Sat. 11-5

VISA MasterCard at no additional charges

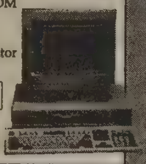
WE ABSOLUTELY, POSITIVELY WILL NOT BE UNDERSOLD

INCREDIBLE SAVINGS ON EXCESS AND NEW-DISCONTINUED PRODUCTS

AST Advantage Multimedia 486SX/33 4MB/270MB

- Pentium Upgradable
- 270MB Hard Drive
- 4MB RAM
- VESA Local Bus
- DOS, Windows, Mouse
- Multimedia w/2X CD-ROM
- 16-Bit Sound Card
- 2 Labtec Speakers
- 14" .28 SVGA Color Monitor
- 96/24 Fax
- 1 Year Warranty

$899



Advantage 486DX2/66MHz Multimedia System

- Pentium Upgradable
- 420MB Hard Drive
- 4MB RAM
- VESA Local Bus
- DOS, Windows, Mouse
- Multimedia w/2X CD-ROM
- 16-Bit Sound Card
- 2 Labtec Speakers
- 14" .28 SVGA Color Monitor
- Built-in 14.4 Fax Modem
- 1 Year Warranty

$1099

Multimedia Pentium 60MHz 8/540 CD 1.44 Mini Tower

Performance and Features:
- Pentium-60MHz/256K Cache
- 8MB RAM
- 540MB Hard Drive/ One 3.5" Floppy
- Double-Speed CD-ROM
- 16 Bit Audio/Mic/Speakers
- 14.4 FAX/Data/Voice Modem
- Telephony Capabilities
- AST Keyboard/Mouse/ Mouse Pad
- One Year In-store Warranty

Expansion Capabilities:
- Two 32 Bit PCI Compatible Slots
- Five 16 Bit ISA Compatible Slots
- Ports/2 Serial/1 Parallel
- 1 PS/2-Compatible Mouse Port
- 1 VGA Connector/1 Keyboard Port

Brilliant Graphics:
- 32 Bit Local Bus VGA Graphics
- 1MB of Graphics Memory
- Up to 1024 x 768 x 256
- 14" .28 SVGA Color Monitor
- DOS, Windows

$1599

Apple® Macintosh® Performa® 600

- 5MB RAM
- 160MB HD
- CD
- Monitor
- MC68030
- 32 Bit

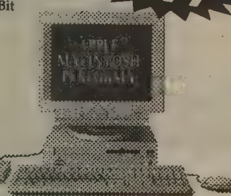
$999

NOW HIRING
Experienced Salespeople and Technicians

Apple® Macintosh® Performa® 476

- 4MB RAM
- 230MB HD
- Monitor
- MC68030
- 32 Bit

$899



Apple® Macintosh® 575 LC

- 8MB RAM
- 160MB HD
- CD Built-in
- Monitor
- M68040

$1299

Apple® Macintosh® Performa® 550

- 5MB RAM
- 160MB HD
- CD
- Monitor Built-in

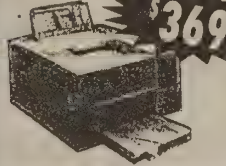
$999

Packard Bell Laser Printer

- 8ppm
- 1.5MB RAM
- 200 Sheet Paper Tray
- 300 dpi
- 1 Year Warranty

Great Price

$369



ALPS LSX1600

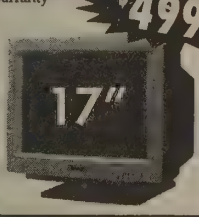
- Heavy Duty
- High-capacity 16ppm Laser Printer
- 1MB RAM
- 300dpi
- 24 Resident Fonts
- 750-sheet Paper Capacity
- Built-in Envelope Feeder
- LaserJet Series® II Emulation
- Optional PostScript® Emulation
- 1 Year Warranty

$699

Samsung MiniMicro 17" Monitor

- SVGA
- 1280x1024
- Multiscan/Digital
- 1 Year Warranty

Only! $499



Brother HL60 Laser Printer

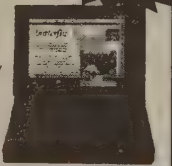
- 6 pages per minute
- Plus a whole lot more!

$349

INEX Notebook

- 486 SLC25
- 4MB RAM
- 120MB HD
- 3.5" Floppy Drive
- SVGA External Monitor
- Mono
- Carrying Case
- Keyboard Port
- Keypad
- DOS
- 1 Year Warranty
- Much More

$649



Notebooks AST

- Intel 486SX/25 Processor
- 4MB RAM Expandable to 20MB
- Local Bus Video; 512K Video Memory
- 120MB Hard Drive
- 3.5" 1.44MB Floppy Drive
- 1 PCMCIA Type III Slot (Compatible with Type II Cards)
- Integrated Trackball
- AC Adapter & NIMH Battery Included
- Includes 1 Serial, Parallel, Mouse, SVGA Plug , Keypad/ Keyboard Ports
- DOS, Windows
- 1 Year Warranty

$849

Notebooks AST

- Intel 486SX/33 Processor
- 4MB RAM Expandable to 8MB
- Local Bus Video; 512K Video Memory
- 120MB Hard Drive
- 3.5" 1.44MB Floppy Drive
- 96/24 Fax Modem
- Integrated Trackball
- AC Adapter & Nicad Battery Incl.
- Includes 1 Serial, Parallel, Mouse, SVGA Plug, Keypad/ Keyboard Ports
- DOS, Windows
- 1 Year Warranty

$899

Bravo Advantage Notebooks AST

- Intel 486SX/33 Processor
- 4MB RAM Expandable to 20MB
- Local Bus Video; 512K Video Memory
- 200MB Hard Drive
- 3.5" 1.44MB Floppy Drive
- 1 PCMCIA Type III Slot (Compatible with Type II Cards)
- Integrated Trackball
- AC Adapter & NIMH Battery Included
- Includes 1 Serial, Parallel, Floppy Drive Mouse, SVGA External Monitor, Keypad/Keyboard Ports
- DOS, Windows
- 1 Year Warranty

$995

IBM PS Note (Color)

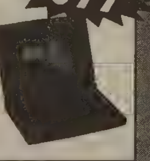
- 486SLC25
- 4MB RAM
- 125MB HD
- Passive Color
- 3.5" Floppy Drive
- Fax Modem
- DOS, Windows
- 1 Year Warranty
- Much More

$1099

Packard Bell

- 486SLC2-50 Processor
- Monochrome Display
- 4MB RAM
- 200MB Hard Drive
- 1.44 Floppy Drive
- PCMCIA Type II Slots
- Integrated Keyboard with Built-in J Mouse Pointing Device
- DOS & Windows
- MicroSoft Works, Money & 8 Game Entertainment Pack
- 1 Year Warranty

$899

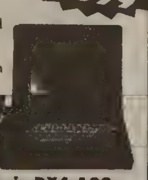


AMBRA Notebook 486 DX4/75MHz

- 4MB RAM
- 340MB Hard Drive
- 3.5" 1.44 Floppy Drive
- 2 PCMCIA Type II, 1 Type III
- Carrying Case
- DOS, Windows
- Integrated Trackball Mouse
- 1 Year Warranty
- Sound Card Built-in

Dual Scan 10.4" Screen $1899

9.5" Active Color DX4/75 $2499



Also available in DX4-100

Packard Bell Multimedia 486SX/25 4MB/428MB

- 428MB Hard Drive
- 4MB RAM
- VESA Local Bus
- DOS, Windows, Mouse
- Multimedia w/2X CD-ROM
- 16-Bit Sound Card
- 2 Labtec Speakers
- 14" .39 SVGA Color Monitor
- 96/24 Fax
- 1 Year Warranty

$899

- AST DESKTOP ADVANTAGE 486DX4/100 8/540....................**$1099**
- ALPS LASER PRINTER 16 PPM 5MB RAM 750 SHEET POSTSCRIPT....................**$899**
- AMBRA DESKTOP 486DX2/50 4/270MB 1.44 DOS WIN MOUSE....................**$699**
- MAC LC 520 WITH MONITOR 4/80....................**$699**
- BATTERY FOR DESKJET 310 PORTABLE....................**$24**
- PRINTER QMS PS825 DUAL TRAY POSTSCRIPT 8PPM....................**$895**
- HARD DRIVE 270MB IDE 3.5"...........**$119**
- 5 ¼ DRIVE MITSUMI....................**$29**
- ACER NOTEBOOK 486DX-25 4/200 ACTIVE COLOR....................**$1699**
- AST NOTEBOOK POWER EXEC. 4MB 120MB HD 386SL25 PASSIVE COLOR....................**$999**
- AST NOTEBOOK POWER EXEC. 486SL(DX)25 4MB MONO120HD..**$1099**
- AMBRA NOTEBOOK 486DX2-66, 4MB RAM, 200MB HD, 9.5" DUAL SCAN COLOR....................**$1699**
- AST NOTEBOOK ADVANTAGE , DUAL SCAN COLOR, 486SX-25, 4MB RAM, 20MB HD....................**$1199**
- AST NOTEBOOK ASCENTIA 900N 4/75MHZ 8/500MB HD 10.4" ACTIVE COLOR....................**$3799**
- APPLE DESKTOP MAC PERFORMA 630CD, 4/250MB HD....................**$1599**
- APPLE DESKTOP MAC PERFORMA 578, 8/320CD W/BUILT-IN MONITOR...**$1499**
- DATA PRODUCT LASER PRINTER 26 PPM POSTSCRIPT 11"X17" 15 SHEET PAPER TRAY AND MUCH MUCH MORE.....**$CALL**
- CANON BUBBLEJET 10SX INKJET PRINTER (FOR NOTEBOOK)....................**$199**

Get an additional $50 off if you find a better price.
90 DAYS SAME AS CASH • APPLY FOR COMPEXPRESS CREDIT CARD

office—to large projects—such as rendering full architectural services for an addition to a house or the development of an entire office complex. And under a pilot plan, A4A professionals will provide assistance and design services to clients anywhere in the world.

A4A principals Cathrine Veikos and Michel Mossessian are still experimenting with the best ways to deliver their consulting services to telecommuters, and at this point welcome inquiries either by email (at *73122.707@compuserve.com*) or by telephone (at 201/943-7154).

Depending on the scope of the work, the team will deliver its information and services by telecommunications, teleconferencing, fax, and other appropriate technologies.

Professional fees will be reasonable, and based on the scope of the project and the time requirements for the team's design professionals and other staff.

There are also plans to set up a home page on the Internet and produce printed materials that cover the basics of ergonomic and architectural design for telecommuters.

A4A's expanded commitment to telecommuting has already been warmly welcomed by consultants and organizations with large numbers of telecommuters, if only because the firm has been named one of America's hottest design firms by *International Design* magazine, and has won several international prizes for its innovative and effective designs for telecommuting centers, planned telecommunities, and similar projects.

New Wrinkle In Telecommuting

While homes are still the most obvious and numerous location from which telecommuters tend to work, a new trend has taken hold among corporate America—the temporary satellite office.

According to various sources with whom I've talked, more and more companies—from AT&T to Andersen Consulting, and dozens or even hundreds of organizations in between—are renting space in vacant office buildings, executive centers, even motels (to support teams that are routinely shifted from region to region), and converting them into "temporary" satellite telecommuting centers for employees they don't want commuting to the regular office any longer.

Often, the company equips these people with mobile technology—cellular telephones, laptop computers, portable faxes, and so forth—to retain flexibility and to avoid the expense of fitting-out the temporary office with telephone lines and other equipment that would otherwise be necessary.

The result: vastly reduced overhead for the corporate employer, and greater flexibility and free time for the telecommuter.

Andersen Consulting, for example, has recently begun a corporate-wide strategic shift from an emphasis on downtown offices to a greater willingness to put their talent out in the field, nearer their clients and their own homes. The new emphasis on telecommuting fits the

Get the Best 16-bit Ethernet Adapter from
CARDWARE ™
Now Available!
Windows-Based CardWare Network Manager:
- * Easy To Use & Install
- * Inventory Control
- * On-Line Diagnostics
- * PC Configuration Access
- * Monitoring Of Network Traffic
- * Auto Discovery
- * Isolates The Faulty Station

CARDWARE Ethernet Adapter
✓ High Performance
✓ Exceptional Reliability
✓ Low Cost ✓ 24 Hr. Support

- **Free I/O** address **conflict and IRQ conflict**
- Transmitting distance: **1,000 ft.-Coax, 330 ft.-TP**
- **Auto Configuration**
- **Auto Installation** for **NetWare** Client
- **NE2000**/plus compatible
- **National** chip set, **DP83905 AT/LANTIC**
- Supports most network operating systems
- **5-year limited warranty**
- **24-hour BBS: 408-774-9103 Support**

Available At These Bay Area Resellers:
ACCESS COMPUTER Palo Alto (415) 813-0600, Santa Clara (408) 247-4444
ASTG Mt. View (415) 961-5991
EVERSUN TECHNOLOGIES Santa Clara (408) 986-1966
HD COMPUTER Sunnyvale (408) 720-0493, San Francisco (415) 434-8118, El Cerrito (510) 528-0753, Sacramento (916) 483-4278, Fresno (209) 446-0809
HIQ SYSTEMS Sunnyvale (408) 245-5836, Sacramento (916) 635-7842, San Rafael (415) 459-1893, Boston (617) 893-1886, Atlanta (404) 417-1450
NOVACOR San Jose (408) 441-6500
SUMMIT MICRO DESIGN Sunnyvale (408) 739-6348 Seattle (206) 881-1207, Boston (617) 938-5550
TYC COMPUTERS Milpitas (408) 262-3369
VICTS COMPUTERS Mt. View (415) 960-6811

CardWare Lab, Sunnyvale, CA **Dealer/OEM's Welcome**
TEL: (408) 774-9101 & FAX: (408) 774-9102

THIS LIST IS NOT OUR LOWEST PRICES...

We Lower Our Prices Daily, Guaranteed You Get The Lowest Price Everyday!*

We'll Refund 120% Of The Difference If Our Competitors' Prices Are Lower Than Our Daily Low Price*

INTEL PENTIUM CAD STATION

- INTEL Pentium CPU
- 256K EXTERNAL CACHE
- 8 MB RAM
- 1.44 FLOPPY DRIVE
- IDE PCI CONTROLLER CARD
- 540 MB HARD DISK
- 64 BIT SVGA CARD W/16 MILLION COLORS
- 14" FLICKER-FREE FLAT SCREEN NON-INTERLACE MONITOR
- 101 ENHANCED KEYBOARD
- MOUSE
- MEDIUM TOWER CASE

PENTIUM 90 MHz
$1777
PENTIUM 75 MHz
$1577

POWER 486 100/80 MHz SYSTEMS

- 486DX CPU & MOTHERBOARD
- 4 MB RAM
- 1.44 FLOPPY DRIVE
- 420 MB IDE HARD DRIVE
- VLB IDE 32 BITS
- 14" FLICKER FREE NON-INTERLACED MONITOR
- 16 MILLION COLOR WINDOWS ACCELERATOR, 32 BITS VLB
- 101 ENHANCED KEYBOARD
- MOUSE
- MINI TOWER CASE

DX4/100 MHz
$949
DX2/80 MHz
$899

POWER 486 66 MHz SYSTEMS

- 486 66 CPU & MOTHERBOARD
- 4 MB RAM
- 1.44 MB FLOPPY DRIVE
- 14" FLICKER FREE NON-INTERLACED MONITOR
- 420 MB HARD DRIVE
- 32 BIT VLB, 16 MILLION COLOR
- VLB WINDOWS ACCELERATOR CARD
- 101 ENHANCED KEYBOARD
- MOUSE
- MINI-TOWER CASE

DX2/66 MHz
$879
IBM SLC2/66 MHz
$799

BEST VALUE IN U.S.A.	Mother-board	MB+CPU	Basic System (See Below)	Basic System 420MB HDD 8MB SVGA Card SVGA Monitor (540MB + 20)	Basic System 730MB HDD 4MB SVGA Card SVGA Monitor (1.0GB + 99)
	ALL SYSTEMS COME WITH LIFETIME LABOR WARRANTY!				
PENTIUM P5-100/256K C USA	$229	$899	$1229	$1669	$1789
PENTIUM P5-90/256K C USA	229	749	1089	1529	1769
PENTIUM P5-75/256K C USA	229	549	699	1228	1339
486DX4-100 C	79	289	399	949	1039
486DX2-80 C	66	207	319	899	999
486DX2-66 C	66	169	299	879	979
486DX-40 C	66	169	277	849	949
486DX-33 C	66	165	259	849	949
486SX-40 C	66	159	267	839	939
IBM 486SLC2-66/64K C	N/A	117	229	829	929
486DLC-40/128K C	69	105	215	811	911
386DX-40/128K C	69	89	209	774	874

BASIC SYSTEM (Assembled in USA) **Motherboard & CPU, Deluxe Mini-Tower Case w/Power Supply, 101 Enhanced Keyboard, 1.44 MB Floppy, IDE/IO Controller w/2HD/2FD/2S/1P/1G Ports**

PENTIUM UPGRADE

- 90 MHZ PENTIUM CPU
- GREEN MOTHERBOARD
- INSTALLATION/LABOR
- COMPLETE SYSTEM CHECKOUT

$769

486 UPGRADE

- 486DX2/66 OR DX4-100 CPU
- GREEN MOTHERBOARD
- INSTALLATION/LABOR
- COMPLETE SYSTEM CHECKOUT

DX2/66MHz	$229
DX4/100MHz	$299

MULTIMEDIA UPGRADE

- TEAC/PANASONIC CD-ROM
- SOUND BLASTER 16 SOUND CARD
- SPEAKERS & CABLE

DOUBLE SPEED	$197
QUAD SPEED	$279

THOUSANDS OF POPULAR CD TITLES ON SALE!!

FLOPPY & HARD DRIVES

FD 1.44MB High Density	$30
FD 1.2 MB High Density	41
FD Combo 1.2/1.44 MB	83
270 MB IDE	139
420 MB IDE	159
540 MB IDE	175
850 MB IDE	249
1 GB IDE	335
540 MB SCSI	219
1 GB SCSI	529

MONITORS

	14" SVGA 1024 .39 Int	$175
	14" SVGA 1024 .28 Int	193
	14" SVGA 1024 .28 NI	199
IMPRESSION:	3+14" INT/NI	199/207
ACER:	14" SVGA .28 NI	227
CTX:	14" SVGA 1024 .28	222
	15" SVGA 1024 NI	305
	17" CPS1765 1280 NI	595
VIEWSONIC:	6E (14") 15F (15") 17G (17")	242/314/687
NEC, SONY		LOWEST

VIDEO CARDS

SVGA 512K/1MB	$37/53
Windows Accel 1 MB	55
S3 VLB 1MB	67
Cirrus Logic VL 1 MB	65
Genoa VLB 1MB/Phantom 2MB VLB	89/159
Diamond Stealth 64 PCI/VLB 1/2MB	129/168
Diamond Speedstar PCI/VLB 1/2MB	90/138
ATI Ultra Pro PCI/VLB 2 MB VRAM	208/205
Orchid Kelvin 64 PCI/VLB 1/2MB	127/169

FAX/ MODEM

14.4/14.4 Fax/Modem (Int)	$45
14.4/14.4 Fax Modem w/ Voice Mail (Int)	55
14.4/14.4 Fax/Modem (Ext)	79
U.S. Robotics 14400 Fax/Modem	95
U.S. Robotics 28.8 Fax/Modem	209
28.8/28.8 Fax/Modem (Int)	113

MULTIMEDIA

Mitsumi CD ROM Double Speed w/Card	$115
Panasonic CD ROM-562B Double Speed	115
Teac Quad CD-ROM	169
NEC CD ROM Quad Speed	299
Sound Card	39
Sound Blaster 16 Basic/MCD	69/75
Sound Blaster Basic SCSI 2	99
Sound Blaster AWE 32	265
Stereo Speakers 40/50/80/120/160W	25/35/57/59/65

PROCESSORS/MEMORY

486DLC/DX CPU	$LOWEST
SIMM 1/4/8/16 MB (30/72 Pin)	LOWEST
387DX/40/33/25	25
387SX/33/25	23
SWAP 30 Pin with 72 Pin	LOWEST

MISCELLANEOUS

Tape Back-Up 250 MB Conner/Colorado	$125/137
CPU Cooling Fan w/Heat Sink (486/Pentium)	8/15

KEYBOARDS/ MICE

101 Enhanced Keyboard	$13
Smart 101 Enhanced	15
Keytronics 101 Enhanced	23
Focus 2001 (Click)	30
Focus 9000 Programmable	48
Microsoft Natural KB	88
MS Compatible Mouse	6
Microsoft Mouse	23

CASES

Mini Tower w/230W PS	$33
Desktop w/230W PS	39
Compact Mid Tower w/230W PS	49
Mid Tower w/230W PS	57
Full Tower w/230W PS	74
Power Supply	27

IDE I/ O CARDS

IDE w/2S/1P/1G	$11
IDE VL w/2S/1P/1G (2HD/2FD)	16
EIDE VL w/2S/1P/1G (2HD/2FD)	23
VLB IDE/IO w/16550 High Speed I/O (4HD/4FD)	43
Promise EIDE/16550 Hi-Speed (2300T)	49

PRINTERS

HP Inkjet 540/560C	$LOWEST!
HP Laser Series	LOWEST!
Brother HL Series Laser	LOWEST!

NETWORK

16 Bit Ethernet Card	$26
Cable/Terminator	LOWEST
Netware 3.12 5/10/25	569/1249/1849
Netware 4.02 5/10/25	789/1749/2249
Netware Start Kit (Card, Cable & Software)	149

UNITED

Your Technical Partner

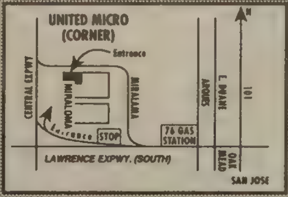
UNITED MICROSYSTEMS, INC.

SALES: (408) 737-8267 Tech Support: (408) 737-2023 Fax: (408) 737-2024

1180 MIRALOMA WAY, #L, SUNNYVALE, CA 94086 MON-SAT: 9am-7pm SUN: CALL FIRST

1 Year Parts & LIFETIME Labor Warranty on Systems, Prices and Company Policy Subject To Change Without Notice.

Not Responsible for Typographic Errors. *Price comparison & refund must be done on the purchase day (see store for details).



Telecommuting *continued...*

company's work style, which has long stressed putting professionals out in the field working elbow-to-elbow with clients instead of sitting at their desks answering telephone calls. The shift to telecommuting has meant as much as a 50% savings in office space for the company, and a commensurate savings in time for its people, as well as vastly higher morale and energy levels.

Over the past half-dozen years, AT&T has pursued the same kind of telecommuting strategy so vigorously that today about 10% of its 120,000 or more managers work this way.

The telecommuting strategy makes sense for an increasing number of companies, particularly in view of recent "facilities management" surveys which seem to show that 50–70% of a conventionally organized company's desks and work spaces are empty at any given time during the workday. This amounts to a huge millstone around the profitability of the average organization—a millstone that temporary satellite offices and other telecommuting strategies can at least partially remove.

Naturally, there are cases of individuals or work groups running into minor problems with telecommuting—such as greater feelings of isolation and a tendency for people to burn themselves out by working too many hours. But companies that do their homework normally anticipate these problems, and apply training and coaching techniques to sidestep them almost completely. When the problems do arise, they can be dealt with through specialized programs developed by consultants or experienced telecommuters within the organization.

After a while, say most telecommuters I've spoken with, you begin to realize your office is not defined by where you sit, but by what you carry in your pocket, your briefcase, or your laptop computer. Once you gain this realization, they report, you begin to increase your productivity and maintain your contacts with other people without the negative side-effects that a number of telecommuters report during the early months of their experiences.

continued on page 332

50–70% of a conventionally organized company's desks and work spaces are empty at any given time during the workday.

NETWORK SOLUTIONS
- File/Print Server
- Tape Back-Up Server
- CD-ROM Server
- Dial In/Out Server
- Fax Server
- Database Server
- Netware/Unix Connectivity

Novell Certified NetWare Engineer

NETWORK SERVICES
- Software/Hardware
- Design, Installation, Training
- Top-Notch Expertise/Support in Novell Netware, UnixWare, Windows NT, SCO UNIX, Lantastic & TCP/IP Networking

INTERNET GATEWAY
FOR
NOVELL, MICROSOFT & UNIX NETWORKS
ISDN CONNECTIONS
If You're Tired of Slow Modem Speeds!!!

CD-ROM DRIVES	
Sony 55E 2X IDE	$165
Sanyo 2X + Sound/16	140
Mitsumi 4X IDE	181
Mitsumi 4X IDE + Sound/16	221
Teac 4X IDE	185
Toshiba 3501B 4X SCSI	290

MONITORS	
ViewSonic 14"/NI/1024x768	$245
15"/NI/1024x768	318
17" V17E	649
17" V17G	679
20" V20G	1270
20" V20	1425
ACER 17"/NI/1024x768	569

NETWORK SPECIAL	
16-Bit Ethernet (BNC or 10 BaseT)	$33
16-Bit Combo Ethernet Card	35
9-Port 10BT Ethernet Hub	139
12-Port 10BT Ethernet Hub	269
12-Port 10BT Ethernet SNMP Hub	489

CPU	
Intel 486DX2-66 MHz	$172
Intel Pentium 90 MHz	510
Intel Pentium 66 MHz	289
AMD 486DX2-80 MHz	133
AMD 486DX4-100 MHz	169
Cyrix 486DX-66	110

HARD DRIVES	
1 GB IDE	$330
850 MB IDE	235
730 MB IDE	225
540 MB IDE	169
420 MB IDE	159

NOVELL NETWARE	
3.12 5-user/10-user	$549/1199
3.12 25-user/50-user	1799/2399
3.12 100-user	3459
4.1 5-user/10-user	559/1199
4.1 25-user/50-user	1799/2419

GAME PLAYING PC SYSTEM
- 80486SLC-33 MHz CPU
- 1.44 MB FDD
- SVGA/512K (to 1 MB)
- DRAM/2 MB (to 16 MB)
- Adlib Sound Card
- VGA to TV Converter
- Game Cartridge Slot
- 2S/1P/1G
- 2 Internal Speakers
- 84 Keyboard
- Power Adapter

CONNECTS TO YOUR TV

THE PERFECT GRADUATION GIFT!

$419

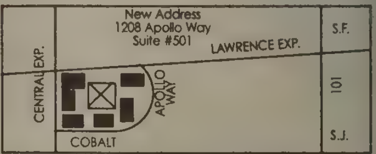
Turnkey Solution
Small/Home Office System Setup
(Hardware/Software/Customize/
Installation/Training/Maintain)

★中英文軟體★
(規劃,設計,安裝,訓練,維護)
.餐館堂食、外賣 .醫院診所
.旅館管理 .錄影帶租售店等
軟體,快速修改,解決一切問題

(408) 245-4734 MING
Restaurant (Dine-in & Delivery),
Medical, E.D.I., Motel & More...

486 PENTIUM NOTEBOOKS

DUAL SCAN 10.3" 486/66..$1749
DUAL SCAN PENTIUM 90 ...$2980



GOLDEN VALLEY SYSTEMS & NETWORKS

NEW ADDRESS
1208 APOLLO WAY, #501 • SUNNYVALE, CA 94086
TEL: (408) 738-4921
FAX: (408) 738-4924
Email: gshu@ix.netcom.com
Hours: M-F 9:30-6

MasterCard VISA

CORPORATE PO'S WELCOME Prices Subject To Change W/O Notice

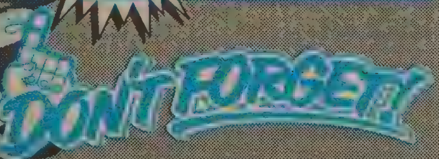
COMPUTER SOURCE OF HAYWARD

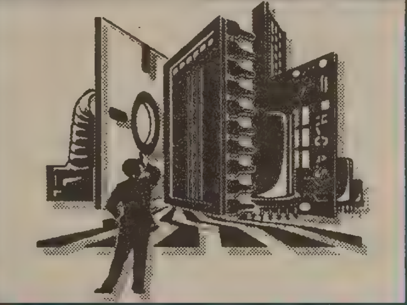
SPECIALIZING IN SYSTEMS AND SOLUTIONS FOR CORPORATE, GOVERNMENT, AND UNIVERSITY ACCOUNTS.

CHECK OUT OUR COMMITMENT TO YOUR SATISFACTION

1. 100% Money Back Guarantee if not satisfied (30 Days).
2. All New and High Quality components.
3. 5 Years Labor and 1 Year Parts Warranty.
4. Lifetime Technical Support and Advice.
5. 24 Hour Turn-around on Service or Loaners Provided.
6. On-Site Service Contracts Available.

100% Satisfaction is our Goal


DON'T FORGET!



EXCEL™ Competitive Pricing

•Fast! Intel Pentium 60-90 MHz
•Intel 486 SX, DX, DX2, EISA VLB PCI

Any Configuration You Can Come Up With.

CALL FOR PRICING / CUSTOM CONFIGURATIONS

PERIPHERALS

- Computers and Laptops
- Motherboards
- Hard and Floppy Drives
- Tape Back-up Drives
- Keyboards and VGA Cards
- CPU & RAM
- Modems and Printers
- Mice and Cases
- Network Systems
- Scanners
- PC Software
- Controllers and Cables
- CD-ROM and Much More

NETWORKING

ADVANCED NETWORK SUPPORT

- Network System Design
- Site Preparation / Installation
- Hardware Configuration
- Software Installation
- On-Site Service Contracts
- Network Administration Training
- Custom Programming

FIELDS OF EXPERIENCE

- Novell
- PCP/IP
- Win for W/G
- Windows NT
- Internet
- AS/2
- Lantastic
- UNIX
- OS400

Novell Authorized Reseller

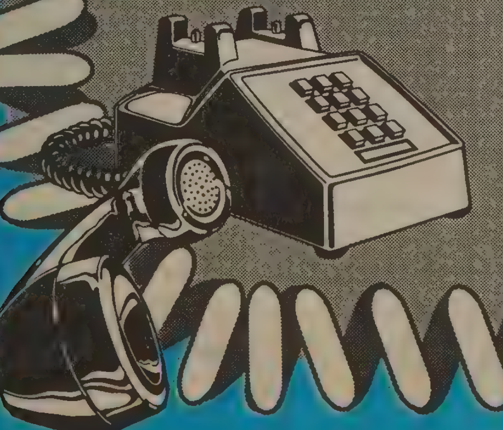
LANtastic™ ARTISOFT INC.

SERVICE

System Upgrade or Repair
On-Site Available

Service Contracts
Loaners Will Be Provided, Software Loading and Systems Consulting

Repair: MONITORS, TERMINALS & PRINTERS (Laser or Dot Matrix)



TRAINING SERVICES

- Hardware
- Software
- Systems Administration

SACRAMENTO LOCATION

2155A Fulton Ave.,
Sacramento, CA 95825
Tel: 916/484-6879

• 1216 W. Winton Ave., Hayward
(510) 784-1136
FAX: (510) 784-1905

Business Hours:
Mon-Fri 10am-6pm
Sat 10am-5pm

UNIX • BY BENNETT FALK

Tclish Expectations

A New And Useful Language For UNIX

No problem is insoluble if you have the right language.

This is one of the dearest convictions of the UNIX user community, handed down from generation to generation. Got a problem? Get a language. None of the existing languages do the job? Great! We can invent a new language! And of course, once a new language has been built, it will be put to new and interesting uses.

Consequently, the history of UNIX is littered with languages of various sorts.

C, A Compiled Language

Most people think immediately of C. The C language was basically invented to realize the goal of making UNIX a portable operating system.

C is a compiled language. A C program consists of one or more files containing C language statements. These files are used as input to a compiler that translates C into object code. The object code files produced by the compiler (along with some object code libraries of standard routines) are then presented to a linker that translates the object code into machine-level instructions for a specific processor. The linker's output is the finished program. It is stored in a binary file that can be executed only on processors that understand the machine instructions it contains.

C is great for complex software projects (like building operating systems) or for programs that require high performance, but it's overkill for the nagging little programming problems of everyday life.

Interpreted Languages

For everyday chores, an interpreted language is more to the point, and the UNIX world has no shortage of interpreted languages. With an interpreted language, each statement in a program is evaluated and executed as it is received by an "interpreter."

Programming in an interpreted language usually requires that you fiddle around with language statements until they produce the desired effect. When you have a collection of statements that does what you want, you simply save it in a file (or script). When you need to run your program, you start the interpreter for the language you're using and either type in the commands or tell the interpreter to read its commands from your script. With little or no modification, your script will run on any computer that has an interpreter for the language you used to create the script.

> The **Tcl interpreter** is designed to be embedded in a **compiled program.** This effectively puts an interpreted language **inside** a compiled program and allows users to **control** the program with **scripts** containing Tcl commands.

Most UNIX users are introduced to interpreted languages through shell programming. A shell is a command interpreter that gives users an environment from which to run programs. UNIX offers lots of different shells (sh, csh, ksh, bash, etc.) from which to chose, and a UNIX user's shell preference is likely to be an article of religious conviction.

All the UNIX shells are programmable. Each has a "job control" language of some sort with built-in commands for controlling the flow of command execution and for setting and retrieving variables. Shell scripts are programs written using a shell's job control language. Practically everyone who uses UNIX gets involved to some degree in writing shell scripts to customize the system's behavior or to automate some job that needs to be done repeatedly.

There are some problems for which the shell languages are simply too general. Early on, for example, the task of formatting documents inspired UNIX developers to create a family of specialized languages (nroff and troff) to control printers and other output devices.

UNIX devotees have always been mesmerized by patterns and regular expressions. In retrospect, the development of awk, a script language based on pattern recognition, seemed inevitable. Awk proved to be such a good idea that recent years have seen the development of Perl, a language best described as awk on steroids.

Tcl

Finally, there is Tcl.

Tcl stands for Tool Command Language; it's pronounced just like "tickle," and it was developed by John K. Ousterhout, a professor of computer science at UC Berkeley. Like Perl, Tcl

continued on page 330

VMS
408-934-9025

7-day UNCONDITIONAL LOW PRICE GUARANTEE!

586-BEST-BUY

- . Asus/Acer Pentium Motherboard
- . Intel Pentium CPU
- . 256K Cache
- . 8MB RAM
- . Mitsumi 1.44MB Floppy Drive
- . 540MB Enhanced IDE Drive
- . 4 PCI Enhanced IDE Interface
- . 2 FD & 2 Hi-Speed I/O Ports
- . Tarantula Lite PCI Video W/1MB
- . 14" Exview 1024x768 .28 Monitor
- . Medium Tower Case/250W P.S.
- . BTC-55 Enhanced Keyboard
- . MicroSoft Compatible Mouse

60MHz $1299
75MHz $1399
90MHz $1599

586-PRO-STD

- . Asus/Acer Pentium Motherboard
- . Intel Pentium CPU
- . 256K Cache
- . 16MB RAM
- . Teac 1.44MB Floppy Drive
- . 1GB WD Enhanced IDE Drive
- . PCI Enhanced IDE + 2 Hi-Speed I/O
- . Diamond Stealth 64/2MB DRAM
- . 15" CTX 1280X1024 .28 Monitor
- . 14.4K Fax/Data Modem
- . Medium Tower Case/250W P.S.
- . BTC-55 Enhanced Keyboard
- . MicroSoft Compatible Mouse

60MHz $1899
75MHz $1999
90MHz $2199

586-PRO-LXE

- . Intel Neptune/Plato Motherboard
- . Intel Pentium CPU
- . 256K Cache
- . 16MB RAM
- . Teac 1.44MB Floppy Drive
- . 1.08GB Conner Fast SCSI-2 Hard Drive
- . NCR Fast SCSI-2 Controller Card
- . PCI Enhanced IDE + 2 Hi-Speed I/O
- . Diamond Stealth 64 W/2MB DRAM
- . 17" CTX 1280X1024 .27 Monitor
- . Sound Blaster 16 Sound Card
- . Teac 4X IDE CD-ROM Drive
- . Pair of 120W Multimedia Speaker
- . Medium Tower Case/250W P.S.
- . Keytronic Enhanced Keyboard
- . MicroSoft Ergonomic Mouse

90MHz $3085
100MHz $3199

586-SUPER-X

- . PentiumTriton Motherboard
- . Intel Pentium CPU
- . 256K Cache
- . 16MB RAM
- . Teac 1.44MB Floppy Drive
- . 1.06GB Conner Wide SCSI Hard Drive
- . Adaptec 2940W Fast Wide SCSI Card
- . PCI Enhanced IDE + 2 Hi-Speed I/O
- . Diamond Stealth 64 W/2MB VRAM
- . 17" SONY-17SF .25 Monitor
- . Sound Blaster AWE32 Sound Card
- . Toshiba 4X IDE CD-ROM Drive
- . Pair of 120W Multimedia Speaker
- . Medium Tower Case/250W P.S.
- . Keytronic Enhanced Keyboard
- . MicroSoft Ergonomic BUS Mouse

90MHz $3799
100MHz $3899

486-ISA-DELL

- . DELL 486 Motherboard
- . Intel/AMD 486 CPU
- . 64K Cache
- . 4MB RAM
- . Mitsumi 1.44MB Floppy Drive
- . WD 512K SVGA to 1MB
- . 14" 1024X768 SVGA Monitor
- . Conner 420MB Enhanced HD
- . Mini Tower Case/230W P.S.
- . BTC-55 Enhanced Keyboard
- . MicroSoft Compatible Mouse

SX33 ....$759
DX33 ....$799
DX2-66.....$829

486-VLB-STD

- . UMC 486 VLB Motherboard
- . Intel/AMD 486 CPU
- . 256K Cache
- . 4MB RAM
- . Mitsumi 1.44MB Floppy Drive
- . Trident 9440 SVGA 1MB to 2MB
- . 14" Exview 1024x768 .28 Monitor
- . Conner 420MB Enhanced HD
- . Mini Tower Case/ 230W P.S.
- . BTC-55 Enhanced Keyboard
- . MicroSoft Compatible Mouse

SX33 ....$869
DX33 ....$899
DX2-66.....$929

486-VLB-LXE

- . Asus 486 VLB Motherboard
- . AMD 486 CPU
- . 256K Cache
- . 8MB RAM
- . Mitsumi 1.44MB Floppy Drive
- . Spider 32 32-bit SVGA with 1MB
- . 14" CTX 1024x768 .28 75Hz Monitor
- . Conner 540MB Enhanced HD
- . Sony 2X IDE CD-ROM Drive
- . Sound Blaster 16 Sound Card
- . Medium Tower Case/ 230W P.S.
- . BTC-55 Enhanced Keyboard
- . MicroSoft Compatible Mouse

DX2-66.....$1379
DX2-80.....$1399
DX4-100 ...$1469

486-PCI-PRO

- . Asus 486 PCI Motherboard
- . Intel 486 CPU
- . 256K Cache
- . 8MB RAM
- . Teac 1.44MB Floppy Drive
- . Diamond Stealth 64 W/2MB DRAM
- . 15" CTX 1024X768 .28 85Hz Monitor
- . Conner 850MB Enhanced HD
- . Toshiba 4X IDE CD-ROM Drive
- . Sound Blaster 16 Sound Card
- . Medium Tower Case w/ 230W P.S.
- . Keytronic Enhanced Keyboard
- . MicroSoft Ergonomic Mouse

DX2-66.....$1699
DX2-80.....$1729
DX4-100 ...$1799

MONITOR

14" CTX 1024x768 .28	$229
14" Exview .28	$209
15" CTX 1024X768 .28	$329
15" SONY-15SF .25	$419
15" Exview 1024X768	$299
17" CTX 1280X1024 .27	$659
17" SONY-17SF .25	$869

MEMORY

1X32-70ns 4MB 72-Pin SIMM	$145
2X32-70ns 8MB 72-Pin SIMM	$289
4X32-70ns 16MB 72-Pin SIMM	$459

TAPE/OPTICAL DRIVE

Conner Tape.Stor 420MB	$189
Colorado DJ-20 250MB	$139
Colorado DJ-35 350MB	$169
680MB Rewritable Optical Drive	$595

FAX/DATA MODEM

14.4K Fax/Data	$49
28.8/14.4K Fax/Data	$99
28.8/14.4K Fax/Data V.34	$149
Best Data 28.8/14.4K V.34	$169
US Robotics 14.4K Int.	$99
US Robotics 28.8 /14.4 V.34 Int.	$219

CONTROLLER CARD

Enhanced VLB IDE/IO	$19
Adaptec 2940 Fast SCSI-2	$179
Adaptec 2940W Wide SCSI	$229

SOUND CARD

Sound Blaster 16 MCD	$79
Sound Blaster 16 SCSI	$99
Sound Blaster AWE32	$259

VIDEO CARD

Spider 32 32-bit with 1MB	$89
Diamond Stealth 64 /2MB DRAM	$159
Diamond Stealth 64 /2MB VRAM	$259

IDE HARD DRIVE

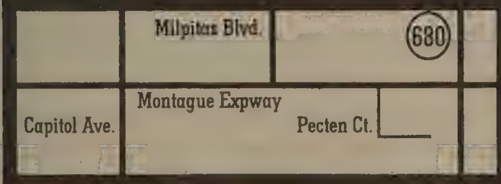
540MB Conner CFS540A	$179
540MB Quntum LT540A	$189
850MB Conner CFA050A	$249
1.28GB WD31200	$369

SCSI-2 HARD DRIVE

540MB Quntum EMP-1080S	$199
1.08GB Conner CFP1060S	$479
1.06GB Conner Wide CFP1060W	$539

CD-ROM DRIVE

Sony 2X IDE Internal	$109
Mitsumi/Toshibo 4X IDE Internal	$179



LIFE TIME LABOR & ONE YEAR PARTS WARRANTY!
- Business Leasing Available
- Corporate & Government P.O. Welcome
- Prices Reflect Cash Discount

VANCOM MICRO SYSTEM

1025 Pecten Court, Milpitas, CA 95035
Business: 408-934-9025 Fax: 408-934-9026
Mon. - Fri. 10AM - 6PM Sat./Sun. 12PM - 5PM

NETWORKING • BY PETER JOHN HARRISON

Managing Small Office Networks

Artisoft's LANtastic Utility Pack Provides A Collection Of Networking Tools That Address The Needs Of A Growing LAN Environment

Most of my consulting work and many of my LAN columns deal with tools and utilities designed to work in Novell NetWare networking environments, but I don't use NetWare for my home office LAN. Instead I use a peer-to-peer system from Artisoft.

Peer-to-peer network solutions, like Artisoft LANtastic and Microsoft Windows for Workgroups, have long been a popular alternative to more expensive, dedicated server systems (like Novell NetWare). In small- and medium-sized networking environments peer solutions tend to be easier to set up and maintain, and I find that they work particularly well in environments where users take their laptops on the road. Unfortunately, like all LANs, peer-to-peer solutions can get out of control unless you keep track of them and manage them properly; but what tools are available to help the peer-to-peer network administrator manage the system and help his users work better?

> LANtastic comes with several of the support tools you have to add on to the better-known Novell NetWare systems.

LANtastic comes with several of the support tools you have to add on to the better-known Novell NetWare systems. LANtastic 6.0, for example, provides a utility that lets you take over a remote LAN user's terminal, allowing LAN administrators to walk users through a program they're not familiar with without walking (or driving) over to the user's location. LANtastic also comes with a mail program that lets you send both text and voice messages to other users on the LAN.

Network administrators and the users they support often need more than the basic tools that come with LANtastic, and their needs tend to grow along with the organization. Growing networks need tools that help track the configuration and location of each piece of equipment and installed software program, and a way to keep all the workstations connected to the LAN backed up.

Tools For A Growing LAN

To address these and other needs Artisoft has assembled a $349 collection of four networking tools that address the needs of a growing LAN environment. Artisoft's LANtastic Utility Pack comes with a tape backup and storage management utility, a network management program that tracks network resources, a modem-sharing utility that gives LAN users shared access to modems attached to other workstations on the network, and a remote-access program that allows off-site users to dial in and access the LAN.

The first program in this suite is one I can put to work right away. No one likes to do backups. They're dull. They're boring. They're absolutely critical to the smooth functioning of a computing environment. I do my system backups regularly, making a full backup every two weeks or so and doing incremental backups every day or two. Although keeping those backups up to date saved me a great deal of trouble last week when a program I was testing trashed my Windows configuration, it was still troublesome to restore the files. Because my tape backup software wasn't designed to track which files have been backed up where, I had to search through several backups to locate all my old Windows files.

ArtiSave is better than my old tape backup utility. Not only does it keep a complete log on what's been backed up to each tape and backup session, it allows me to import the directory information from my existing tapes into the system. Had I been using ArtiSave when I crashed my system last week, I could have asked ArtiSave to restore my system file structure to the way it was just prior to the crash, then sat back while ArtiSave asked me for the tapes needed to restore my files.

ArtiSave also has a storage management feature that helps Network Administrators locate old, unused data files and move them to tape. This is a feature that's sure to come in handy! I'm always forgetting about files I don't need anymore, leaving them on disk where they take up storage space. With ArtiSave I'm looking forward to identifying that old data and packing it onto tape.

As an extra goodie, ArtiSave will work with my existing 250MB "Jumbo" tape drive from Colorado Memory Systems and many other QIC-80 and DAT tape drives. If you're not connected to a LAN, you can also use it as a standalone backup solution.

FACTORY DIRECT

DEALERS WELCOME

CAC DesignStation™ 486DX2/66 CDFAX730

- Intel 486DX2/66 CPU
- 256K Cache
- 3 Slots 32-bit VL Bus
- Green PC--Energy Star
- **8 MB RAM**
- **730 MB Hard Drive, 11ms**
- 1.44 (3.5") Floppy Drive
- 1.2 (5.25") Floppy Drive
- **SVGA Monitor 14" .28 NI**
- 1MB VL-Bus SVGA Video Card with S3 Graphics Accelerator
- Mini-tower Case
- 101 Keyboard & mouse
- **Double Speed CD-ROM**
- **16 bit Sound Card**
- **Multimedia Speakers**
- **14.4k FAX Modem**
- *MS Dos 6.22, MS Windows 3.1*
- *MS Works 3.0*
- *MS Money 3.0*
- *Compton's Encyclopedia 1995*
- *350 Games*

$1495

CAC DesignStation™ 486DX2/66 CDFAX

- Intel 486DX2/66 CPU
- 256K Cache
- 3 Slots 32-bit VL Bus
- Green PC--Energy Star
- **8 MB RAM**
- **420 MB Hard Drive**
- 1.44 (3.5") Floppy Drive
- 1.2 (5.25") Floppy Drive
- **SVGA Monitor 14" .28 NI**
- 1MB VL-Bus SVGA Video Card with S3 Graphics Accelerator
- Mini-tower Case
- 101 Keyboard & mouse
- **Double Speed CD-ROM**
- **16 bit Sound Card**
- **Multimedia Speakers**
- **14.4k FAX Modem**
- *MS Dos 6.22, MS Windows 3.1*
- *MS Works 3.0*
- *MS Money 3.0*
- *Compton's Encyclopedia 1995*
- *350 Games*

$1445

CAC DesignStation™ 486DX2/66

- Intel 486DX2/66 CPU
- 256K Cache
- 3 Slots 32-bit VL Bus
- Green PC--Energy Star
- **8 MB RAM**
- **420 MB Hard Drive**
- 1.44 (3.5") Floppy Drive
- **SVGA Monitor 14" .28 NI**
- 1MB VL-Bus SVGA Video Card with S3 Graphics Accelerator
- Mini-tower Case
- 101 Keyboard & mouse
- *MS Dos 6.22, MS Windows 3.11*

$1145

CAC DesignStation™ 486SX/50

- **4 MB RAM**
- **420 MB Hard Drive**
- 1.44 (3.5") Floppy Drive
- **SVGA Monitor 14".28 NI**
- 512 KB SVGA Video Card
- Mini-tower Case
- 101 Keyboard & mouse
- *MS Dos 6.22, MS Windows 3.11*
- CD ROM, Sound Card $200 extra

$895

CAC DesignStation™ P5/66 CDFAX

- Intel Pentium CPU
- 256 K Cache
- 3 Slots 64-bit PCI Bus
- Green PC - Energy Star
- **8 MB RAM**
- **730 MB Hard Drive 11ms**
- 1.44 (3.5") Floppy Drive
- 1.2 (5.25") Floppy Drive
- **SVGA Monitor 14" .28 NI**
- 1MB PCI SVGA Video Card with S3 Graphics Acceleration
- Mini-tower Case
- 101 Keyboard & mouse
- **QUAD Speed CD-ROM**
- **16 bit Sound Card**
- **Multimedia Speakers**
- **14.4k FAX Modem**
- *MS Dos 6.22, MS Windows 3.1*
- *MS Works 3.0*
- *MS Money 3.0*
- *Compton's Encyclopedia 1995*
- *350 Games*

$1795

CAC DesignStation™ P5/90 CDFAX

- Intel Pentium CPU
- 512K Cache
- 3 Slots 64-bit PCI Bus
- **16 MB RAM**
- **1GB Hard Drive 9ms**
- **Removable Hard drive**
- 1.44 (3.5") Floppy Drive
- **SVGA Monitor 15" .28 NI**
- 2MB PCI SVGA Video Card with S3 Graphics Accelerator
- Mini-tower Case
- 101 Keyboard & mouse
- **Quad Speed CD-ROM**
- **16 bit Sound Card**
- **Multimedia Speakers**
- **14.4K FAX Modem**
- *MS Dos 6.22 , MS Windows 3.11*

$ 2695

CAC DesignStation™ P5/90 CDFAX850

- Intel Pentium CPU
- 256K Cache
- 3 Slots 64-bit PCI Bus
- **8 MB RAM**
- **850MB Hard Drive**
- 1.44 (3.5") Floppy Drive
- **SVGA Monitor 14" .28 NI**
- 1MB PCI SVGA Video Card with S3 Graphics Accelerator
- Mini-tower Case
- 101 Keyboard & mouse
- **Quad Speed CD-ROM**
- **16 bit Sound Card**
- **Multimedia Speakers**
- **14.4K FAX Modem**
- *MS Dos 6.22 , MS Windows 3.11*
- *MS Works 3.0, MS Money 3.0*
- *Compton's Encyclopedia 1995*
- *350 Games*

$ 1995

CAC DesignStation™ P5/100

- Intel Pentium CPU
- 256 K Cache
- 3 Slots 64-bit PCI Bus
- **8 MB RAM**
- **730 MB Hard Drive 11ms**
- 1.44 (3.5") Floppy Drive
- **SVGA Monitor 14" .28 NI**
- 1MB PCI SVGA Video Card with S3 Graphics Accelerator
- Mini-tower Case
- 101 Keyboard & mouse
- *MS Dos 6.22, MS Windows 3.11*
- CD ROM,Sound Card $200 extra

$ 1895

All systems come with MS DOS & WINDOWS disks and manuals

CAC DesignStation™ 486DX2/66 Notebook

- Intel 486DX2/66 CPU
- 4MB RAM
- 340MB Hard drive
- Color monitor
- 16 bit Sound Card & Speakers

$1895

Standard Options: Price with system purchase

15" SVGA .28 NI 1280x1024 Flat, Square Green	add $100
17" SVGA .26 NI 1280x1024 Flat Square Green	add $400
250 MB Tape drive 3.5"	add $135
Mid Tower Case	add $40
Full Tower Case	add $50
2MB VRAM on S3 Video Card	add $45

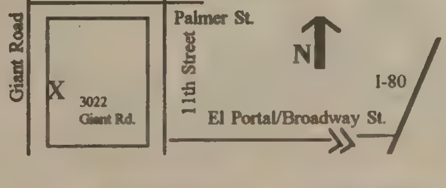
CAC and DesignStation are trademarks of Computer Applications Company. Other trademarks belong to their respective owners.

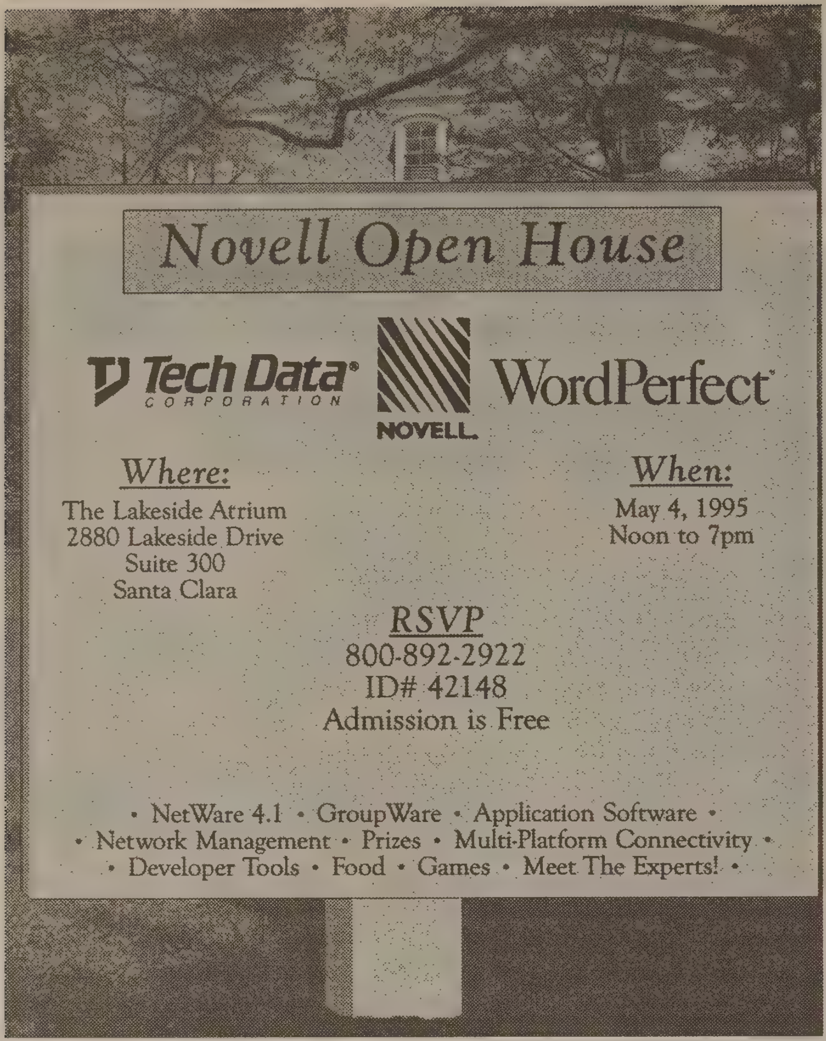
CAC
computer
applications
company

Computer Applications Company
3022 Giant Road.
San Pablo CA 94806.
Phone: (510) 412-3870
FAX: (510) 412-9939
Mon-Fri: 9-6pm; Sat: 12-6pm

One year warranty.

Dealer inquiries welcome.
Prices reflect cash & check discounts.
Prices subject to change without notice.
Not responsible for typographical errors.





Novell Open House

Tech Data CORPORATION NOVELL. WordPerfect

Where:
The Lakeside Atrium
2880 Lakeside Drive
Suite 300
Santa Clara

When:
May 4, 1995
Noon to 7pm

RSVP
800-892-2922
ID# 42148
Admission is Free

• NetWare 4.1 • GroupWare • Application Software •
• Network Management • Prizes • Multi-Platform Connectivity •
• Developer Tools • Food • Games • Meet The Experts! •

DISKETTE 19¢*

* Price per one 3.5" DS/HD Unformatted w/min. of 50 disks purchase

Duplication Servic...49¢* per disk!
* 3.5" DS/HD

Fast & Error Free!

End User/Retailer/System House	Qty 50	Qty 500
3.5" DS/HD Formatted	29¢	25¢
3.5" DS/DD Formatted	23¢	22¢
5.25" DS/HD Un-Formatted	22¢	21¢

Software Developer/Duplication

65% Clip Duplication Grade	Qty 1000	Qty 5000
3.5" DS/HD	29¢	27¢
3.5" DS/DD	24¢	23¢
5.25" DS/HD	25¢	23¢

100% Guaranteed; Same Day Shipping UPS/FedX
Corporate, Government, Education PO's Welcome!
Call for Quantity Discount; Color Diskettes Available!

JAC Industrial Inc.
(408)748-9388
Fax (408)748-9738
1116 Walsh Ave. Santa Clara CA 95050

Reducing fifteen individual modems down to a shared pool of five can easily save $2400 over the course of a year.

Maintaining a LAN is more than just keeping everything backed up. Network administrators also have to keep track of the equipment and software installed on the LAN and make sure network resources are online and don't get overloaded. LANtastic Management Services helps administrators keep ahead of the game, by monitoring the network and letting you know when new equipment is installed, and whether it's online or offline. LANtastic Management services can also be configured to warn you when a resource reaches preset usage levels, so you can work proactively to prevent network overloads that would impede the timely servicing of file or print requests.

The LANtastic Utility Pack comes with the "Basic" version of the LANtastic Management Services software, which does all the things I just mentioned. For an extra $399 you can upgrade to the "Advanced" version, which adds other useful management tools, like software license tracking and the option to have the software call your pager you when LAN components go offline or loads exceed preset levels.

Artisoft also includes its modem-sharing utility in the Utility Pack. At first you might think that a modem-sharing program is overkill when quality, high-speed 14.4Kbps modems can be had in the low $100 range, but the cost of maintaining a modem is more than just its purchase price. You also have to consider the cost of the phone lines connected to the modems. If a business can create a shared pool of modems, they can reduce the number of phone lines they pay for. At $20 per phone line per month, those savings add up quickly; reducing fifteen individual modems down to a shared pool of five can easily save $2400 over the course of a year.

The last tool in the LANtastic Utility Pack is Microcom's Carbon Copy remote-access software. Carbon copy lets users dial in to their LAN workstation and operate their computer remotely, taking over the functions of their office PC's keyboard and monitor. Carbon Copy is the perfect tool to round out the Utility Pack because it gives end-users more freedom to telecommute from home or keep on top of their email while they're on the road.

I like the LANtastic Utility Pack. It combines into a single package many important, even vital networking tools, all at a fraction of what it would cost if you were buying the same functions for a Novell networking environment. ■

Copyright © 1995 by Peter John Harrison. All rights reserved.

RESOURCES:

Artisoft, Inc.
2202 N. Forbes Blvd.
Tuscon, AZ 85745
(602)670-7100

3 YEARS PARTS
LIFETIME LABOR WARRANTY*

FIND OUT WHY SUN MICROSYSTEMS, CLOROX, NORDSTROM, & MASON MCDUFFY CALL US!

When **Sun Micro** needed a complete voice fax network solution globally, US, Japan, and Europe, who did they call? . . . PARS

When **Clorox** needed a high performance NextStep UNIX Network Solution, who did they call? . . . PARS

When **Nordstrom** needed a top-of-the-line graphics design solution for their in-store promotion needs, who did they call? . . . PARS

When **Mason McDuffy** needed a complete office automation system, who did they call? . . . PARS

THE REASON: PARS provides solutions. That's why PARS has been chosen IBM Business Enterprise Solutions Team, Lotus Note Partner, Microsoft Solution Provider. At PARS we specialize in solutions with great prices, plus complete service and warranty. PARS INTERNATIONAL COMPUTER, a high technology company serving people like you.

486-66 Value Station

- 2 VESA Local Bus 32 Bit/5 ISA Slots
- 4MB RAM 70ns High Speed
- 210MB Fast Enhanced Hard Drive
- 1.44 Floppy Drive
- 2 Floppy, 2 Hard, 2 Serial, 1 Printer, 1 Game Port
- Mini-Tower Case w/PS
- 101 Enhanced Keyboard

PLUS

- 110 Home & Business Program Titles Included
- Free Internet & America Online Software Included

MONITOR NOT INCLUDED

$499

486DX2-100 Best Buy

- Zif Socket Upgradable to Pentium
- 256K SRAM Write Back Cache
- 4MB RAM 70ns 72 pin exp. to 128MB (add $160 for 8MB)
- 420MB IDE Hard Drive
- VESA LB IDE Controller
- 32 Bit VESA Local Bus SVGA w/1MB and High Speed Windows Accelerator
- 14" Digital SVGA Non-Interlaced .28 Full Screen Monitor
- 1.44 Floppy Drive
- 2 Serial, 1 Parallel, 1 Game Port
- Mid-Tower Case w/230W Power
- 101 Enhanced Keyboard
- Energy Star

PLUS

- 110 Home & Business Program Titles Included
- Free Internet & America Online Software Included

$999

Pentium 90 Executive System

- Intel Neptune Chipset/Energy Star/Zif Socket
- 256K SRAM Write Back Cache
- PCI/ISA 64 Bit Motherboard
- 8MB 70ns RAMs expandable to 192MB
- 540MB Fast Disk Drive
- 1.44 Floppy Drive
- 14" Digital SVGA Non-Interlaced .28 Full Screen Monitor
- PCI 1MB 64 Bit Card Exp. to 2MB w/Windows Accelerator
- Medium Tower Case w/250W PS
- 101 Enhanced Keyboard

PLUS

- 110 Home & Business Program Titles Included
- Free Internet & America Online Software Included

BEST BUY

$1649

Choose 5 CD Titles with any MultiMedia System Purchase from our stock of over 200 well-known CD Titles!

UPGRADE SPECIAL

UPGRADE YOUR COMPUTER TO 486-66 FOR $149
MOTHERBOARD & CPU INCLUDED

FREE CD-ROM DISK

We build the best MultiMedia systems in the country. To prove it, we will give you a FREE CD† when you stop by for a demo of our MultiMedia Systems. We will also beat any quote, plus give you an additional FREE CD†. Choose from our large selection of well known CDs.

MultiMedia 486DX2-66 Smart Station

- 8MB RAM 70ns Expandable to128MB
- 256K SRAM Write Back Cache
- 420MB Fast Enhanced Hard Drive
- 1.44MB Floppy Drive
- VESA Local Bus IDE Controller
- 32 Bit VESA Local Bus SVGA Card w/1MB RAM
- 14" Digital SVGA Non-Interlaced .28 Full Screen Monitor
- Sony 2X Speed CD-ROM
- 16 Bit Stereo Sound Compatible with Sound Blaster
- Pair of AMP Speakers
- AT I/O Card w/2S,1P, and 1G Ports
- Mid Tower Case w/230W PS
- 101 Enhanced Keyboard
- Includes your choice of 5 CD Titles from our stock

PLUS

- 110 Home & Business Program Titles Included
- Free Internet & America Online Software Included

$1349

MultiMedia 486DX4-100 Performer Station

- 8MB RAM 70ns Expandable to 128MB
- 256K SRAM Write Back Cache
- 420MB Fast Enhanced Hard Drive
- VESA LB IDE Controller
- 32 Bit Local Bus SVGA Card w/1MB
- 14" Digital SVGA Non-Interlaced .28 Full Screen Monitor
- 1.44 Floppy Drive
- Sony 2X Speed CD-ROM
- 16 Bit Stereo Sound Compatible with Sound Blaster
- Pair of AMP Speakers
- AT I/O Card w/2S, 1P, and 1G Ports
- Mid Tower Case w/230W PS
- 101 Enhanced Keyboard
- Includes your choice of 5 CD Titles from our stock

PLUS

- 110 Home & Business Program Titles Included
- Free Internet & America Online Software Included

$1499

MultiMedia Pentium 90/100 Advanced Power Station

- Intel Neptune Chipset & Motherboard
- 8MB RAM 70ns Expandable to 192MB
- 256K SRAM Write Back Cache
- 850MB Fast Enhanced Hard Drive
- 1.44 Floppy Drive
- VESA Local Bus IDE Controller
- 64 Bit PCI SVGA Card w/1MB
- 14" Digital SVGA Non-Interlaced .28 Full Screen Monitor
- Sony 2X Speed CD-ROM
- 16 Bit Stereo Sound Compatible with Sound Blaster
- Pair of AMP Speakers
- AT I/O Card w/2S,1P, and 1G Ports
- Mid Tower Case w/230W PS
- 101 Enhanced Keyboard
- Includes your choice of 5 CD Titles from our stock

PLUS

- 110 Home & Business Program Titles Included
- Free Internet & America Online Software Included

$1995/2095

MultiMedia Pentium 90/100 Super CAD Station

- Intel Neptune Chipset & Motherboard
- 256K SRAM Write Back Cache
- 16MB RAM 70ns, 72 pin expandable to 192MB
- 1GB Fast SCSI-2 Hard Drive
- 1.44 Floppy Drive
- Adaptec 2940 PCI SCSI Controller
- PCI Enhanced IDE & Hi Speed I/O
- 64 Bit Diamond Stealth 64 w/2MB RAM
- 14" Digital SVGA Non-Interlaced .28 Full Screen Monitor (17" Hitachi Tube NI Monitor Add $345)
- Toshiba 4X Speed SCSI CD-ROM
- 16 Bit Stereo Sound Compatible with Sound Blaster
- Pair of Speakers
- Medium Tower Case
- 101 Enhanced Keyboard
- Includes your choice of 5 CD Titles from our stock

PLUS

- 110 Home & Business Program Titles Included
- Free Internet & America Online Software Included

$2995/3095

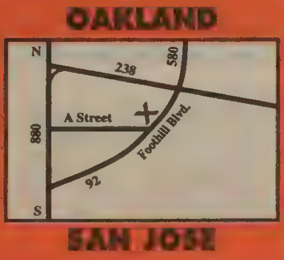
PARS
INTERNATIONAL COMPUTER
Now in our 6th Year!

510/733-0103
FAX: 510/733-0206
22445 FOOTHILL BLVD. • HAYWARD, CA

EASY FINANCING
NO PAYMENT FOR 6 MONTHS

VISA MasterCard

sales@pars.com



DALLAS, TX
214-902-8386

MIAMI, FL
305-531-5878

ATLANTA, GA
404-391-0205

*Ask for Complete Warranty Details. Corp., Govt., & Educational P.O.'s Welcome. Dealer Inquiries Welcome. Offer Expires 5/29/95. Prices reflect cash or check discount.
†Call for Details. Prices and Availability subject to change without notice. Not Responsible for typographical errors.

JUST NETWORKING

Let Us Navigate Into the

3Com COMPAQ Cray Communications DigiBoard

Enterprise Connectivity is our focus.

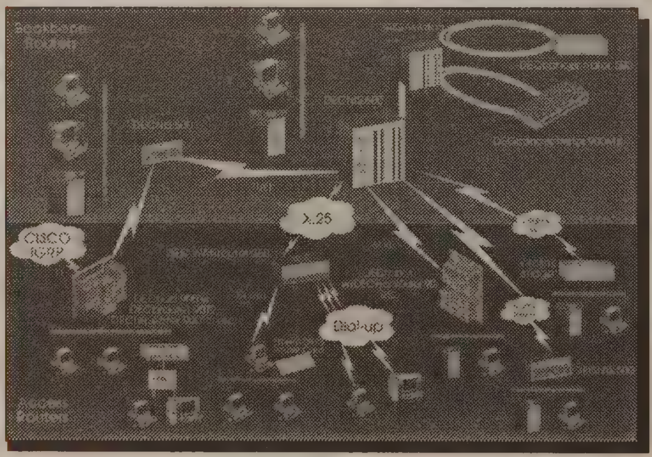
SERVICES PROVIDED

- Complete needs analysis of hardware and software
- Detailed network design and layout
- Complete cabling services for ethernet, Thick/Thin/10BaseT, token Ring, UTP/STP, FDDI, etc.
- Wide Area connectivity thru T1, fractional T1, 56K, ISDN, X25, ATM and Frame Relay using IPX, TCP/IP and other protocols
- Multiplatform integration and gateways (PC's, MAC, UNIX Stations, Mini and mainframe)
- Installation of applications and customization
- Disaster planning and recovery
- Troubleshooting and performance monitoring
- Technical support hotline
- Support contacts

OPERATING SYSTEMS

- Novell NetWare 3.X and 4.X
- Microsoft Windows NT
- UNIX
- OS/2
- DOS/Windows
- Mac OS system 6.X and above

Use Digital's routers to support a range of multivendor LAN and WAN environments.


CISCO IGRP
X.25
Dial-up

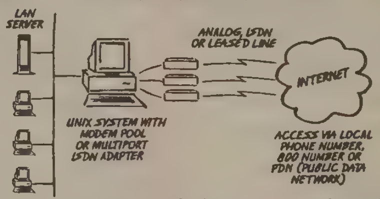
CALL

1-800-526-8735

FOR EXPERT HELP

Digiboard Internet Access Solutions Over ISDN

UNIX GATEWAY


LAN SERVER
ANALOG, ISDN OR LEASED LINE
INTERNET
UNIX SYSTEM WITH MODEM POOL OR MULTIPORT ISDN ADAPTER
ACCESS VIA LOCAL PHONE NUMBER, 800 NUMBER OR PDN (PUBLIC DATA NETWORK)

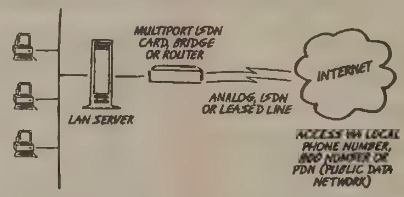
At home, the easiest way to connect with the Internet is through an on-line service such as CompuServe, Delphi or Prodigy. All you need is a PC, a modem, and communications software such as Carbon Copy or ProComm. The Internet provider takes care of everything else for a monthly fee plus a per-minute usage charge.

Another option is to use a service such as PSI's InterRamp which provides you with an actual IP address on the Internet. For this option, you need to run an IP protocol stack on your PC along with some type of Internet access package. There are packages available today that offer both TCP/IP and Internet access in a single package. Or, if you are technically adept, free "shareware" can be downloaded from the Internet.

LAN InterNet Access

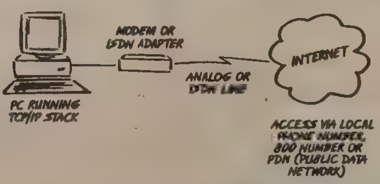
Many companies today are choosing to provide all network members with Internet access. Following are two options for linking LANs to the Internet.

IP ROUTER


MULTIPORT ISDN CARD, BRIDGE OR ROUTER
INTERNET
ANALOG, ISDN OR LEASED LINE
LAN SERVER
ACCESS VIA LOCAL PHONE NUMBER, 800 NUMBER OR PDN (PUBLIC DATA NETWORK)

One of the easiest solutions is to set up a Unix host as a gateway for PC or terminal users to the Internet. For example, SCO's Global Access product integrates TCP/IP networking services, a graphical user interface, graphical e-mail, security and the SCO Unix operating system into a single package. Non-Unix Computers will need to run an X-terminals emulation package to access the Unix gateway. A modem pool Multiport ISDN adapter, or other communications device, is also needed.

PERSONAL INTERNET ACCESS


MODEM OR ISDN ADAPTER
INTERNET
ANALOG OR ISDN LINE
PC RUNNING TCP/IP STACK
ACCESS VIA LOCAL PHONE NUMBER, 800 NUMBER OR PDN (PUBLIC DATA NETWORK)

For companies that don't want a dedicated Unix gateway, the LAN server or a router on the LAN can provide network members with Internet access. An IP protocol stack must be running on the server along with Windows, DOS or Macintosh client software. The server needs to be equipped with an adequate number of communications devices (such as a modem pool or Multiport ISDN LAN adapter) and it requires either a direct connection such as a leased line, or a switched connection such as an analog or ISDN phone line, to an Internet provider.

your Enterprise
Future

LAN TREK

"Enterprise Connectivity Solutions"

digital Microsoft intel hp IBM

NOVELL SOFTWARE

NetWare Operating Systems

NetWare v3.12 50 User $2,679

NetWare 3.12 5/1 0 User	599/1,379
NetWare 3.12 25/50 User	1,959/2,679
NetWare 3.12 100/250 User	3,759/6,766
NetWare 3.12 5 User Spanish version	959
NetWare 3.12 10 User Spanish version	2,195
NetWare 3.12 Manuals only	159

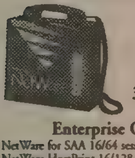
NetWare v4.1 5 User $799

NetWare 4.1 5/10 User	799/1,799
NetWare 4.1 25/50 User	2,595/3.479
NetWare 4.1 100/250 User	4,895/8,689
NetWare 4.1 500/1000 User	14,595/26,539
NetWare 4.1 Manuals Only	149
Personal NetWare 1/5 user	69/279

UNIX Connectivity

LAN WorkGroup v4.2 5/10 User	1,095/1,789
LAN WorkPlace for DOS 1 /10 User	279/1,439
NetWare NFS Gateway vl.2 5 User	1,095
NetWareNFS Gateway vl.2 10 User	1,839
NetWare NFS Starter Kit	1,095
NetWare/IP vl.1 5/10/25User	369/659/995

Novell NetWare Connect



2 PORT $439
8 PORT $1595
32 PORT $4395

Enterprise Connectivity

NetWare for SAA 16/64 session	1,439./4,329
NetWare HostPrint 16/128 sessions	869./2,189
NetWare Multi Protocol Router/Plus	729./1,078
NetWare for Macintosh v3.12 200 User	729
NetWare for Macintosh v4. Unlimited	879

NetWare Management System v2.0
$1,799

LANalyzer for Windows v2.1	1079
NetWare LANalyzer Agent 1-segment	1095
NetWare LANalyzer Agent multi-segment	1835
NetWare management system v2.0	1799

Looking to save money on Novell?

Upgrade from your existing network operating system including most peer-to-peer networks, and save! Also ask about adding users, changing versions, or consolidating multiple products.

Upgrade to 3.12 or 4.1 Users

From Any	5	10	25	50	100
5	347	1349	2125		
10		695	1537	2447	
25			1047	1956	3357
50				1397	2797
100					1957

IBM Software

Lan Server 4.0	695
Lan Server Advanced 4.0	1499
OS/WARP	89
OS/2 2.11	165
OS/2 Windows	145

MICROSOFT NT

Microsoft NT Server $699
Microsoft NT Workstation $319

Windows NT Server v.3.5 CD	699
Windows NT Server v.3.5 for License Additional Server	599
Windows NT Server Documentation	89
Windows NT Node License	35
Workstation Full Version 3.5" or CD	3

SCSI HARD DRIVES

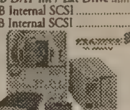
1 Gigabyte 9ms 3.5"
SCSI Hard Drive
Fujitsu
$588
* NEW LOW PRICE

CONNER	
CFA540S 540 MB 12MS 3.5"	379
CFP1060S 1.06GB 9 MS 3.5"	522
FUJITSU	
5 Year Manufacturer Warranty	
M2694ESA 1.0GB 9ms 3.5"	588
M26B4SAU 530MB 3.5"	346
DIGITAL	
3.0 GB Full Height SCSI	995
IBM	
IBM 1.0 GB 8.5 MS3.5" SCSI	622
IBM 2.0 GB 9.5 MS3 5" WIDE/FAST	1,299
MICROPOLIS	
MC 4110 1.0 GB 10MS 3.5"	599
MO 2217 1.7 GB 9 MS 3.5"	999
MC 1926 2.1 GB 13 MS5.25"	1,299
MC 1936 3.0 GB 12 MS 5.25"	1,877
Micropolis Raid Arrays	
Micropolis Raidation LT 2100	3999
Micropolis Raidation LT 3520	4979
Micropolis Raidation 4200	6949
Micropolis Raidation 6040	9079
Micropolis Raidation 18000 18.0 GB	12,999
SEAGATE	
ST 11200 N 1.0 GB 10.5 MS 3.5"	589
ST 11900 N 1.7 GB 9MS 3.5"	1,025
ST 12400 N 2.1 GB 9MS3.5"	1,299
ST 410800 N 9.0 GB 9MS5.25"	4,399
ST 43400 N 2.9 GB 11MS 5.25"	2,189
ST I 5230 N 4.2 GB 9 MS 3.5"	2,419
QUANTUM	
EMPIRE I.O8GB SCS1-2	599
EMPIRE 2.1 GB SCS1-2	1099
HARD DISK CONTROLLERS	
Adaptec 1542CF SCSI Host Adapter	205
Adaptec 1542CF SCSI Host Kit	255
Adaptec 2742 EISA SCSI Host Kit	379
Adaptec 2842 Local Bus SCSI Adapter	259
Adaptec IN2000 16 bit SCSI Host Kit	159
Adaptec AHA 2940 PCI SCSI Adapter	299
Adaptec 2742W Wide EISA	399
Bus Logic KT946C PCI SCSI Adapter	299
Bus Logic Wide SCSI EISA	399

TAPE DRIVES

Colorado PowerDAT 6000
4 GB Internal $1,295
4 GB External $1,595

Colorado DJ-25 700 MB Internal Drive	349
ColoradoPowertape 2GB Int/Extl,099	1279
ColoradoPowertape SCSI Controller	169
ColoradoPT1 0 1.OGB SCSI-2 Internal	699
ColoradoPowertape Cartridge 2/4 GB	50/54
Colorado PowerDAT 6000 4GB Int Extl, 295	1595
Colorado PowerDAT 6000 Cartridge 5 pk,	95
Colorado Trakker 350MB PORTABLE	359
Conner Tapestor 4000 4GB QIC	589
Conner Turbo 4.OGB DAT Internal	989
Conner Turbo 4.OGB DAT External	1189
DEC 4 MM GB DAT Drive	1299
DL 2120 Formatted 250MB Tapes ea	20
DL 2120 Formatted 250MB Tapes 5 pk	89
DL 90 - 4mm Data Tape	15.99
Hewlett Packard JetStore 2.OGB DAT	949
Hewlett Packard JetStore 8.OGB DAT	1,399
Hewlett Packard 2000E 2.OGB DAT Kit	1,479
Intel StorageExpress XLD RJ 40	8,099
Intel StorageExpress ELD RJ 40	4,599
Tandberg 2.5-5GB w/SYTOS+	1109
Tecmar DataVault 8000 8GB External	1,588
Sony 5200 4 MB DAT Int / Ext Drive	929./1,089
Wangtek 1-2 GB Internal SCSI	959
Wangtek 4.DGB Internal SCSI	1,099

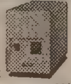


2.O GIGABYTE EXABYTE TAPE BACKUP
Complete Internal Kit $789
Complete External Kit $949

- Data Transfer up to 30MB/Minute • File SECURE Software
- SCSI 2 Interface & Cable • 2 Year Cross Ship Warranty from MFG
- One Tape Included

Exabyte FS1G 1-2.0 GB Tape Int	789
Exabyte FS1G 2.0 GB Tape Ext	949
Exabyte 42001 2.0 GB 4mm Dat Int	925
Exabyte 4200E 2.0 GB 4mm Dat Ext.	1099
Exabyte 4200CI 2.4 GB 4mm Dat Int.	1049
Exabyte 4200CE 2.4 GB 4mm Dat Ext	1229
Exabyte 82051 2.5-5 GB 8mm Dat Int	1459.
Exabyte 8205E 2.5-5 GB 8mm Dat Ext	1749
Exabyte85051 5-10GB 8mmDatInt	2295
Exabyte 8505E 5-10 GB 8mm Dat Int.	2579
Exabyte Autochanger Tape Ext	6559
Exabyte 5 Pack Tapes for FS1G	179
Exabyte 5 Pack Tapes for 4mm Dat	79

POWER & DATA PROTECTION



Smart UPS 600
File-Server Backup
(retail $599)
$379

American Power 120 Volt

BackUPS 200/280	99/109
BackUPS 400/450	179/209
BackUPS 600/900/1250	299/389/539
SmartUPS 250/400/600	259/329/379
SmartUPS 900//1250/2000	519/659/1119
Matrix 3000/5000	2895/4349
SmartCELL for Matrix	549
Line Conditioner LR600/LR1250	139/195
PowerChute Plus for Novell	79
PowerChute for Windows	49
Interface for Lantastic & LAN Manager	39
Network Surge Arrest 3 Outlet/7 Outlet	23/34
PowerManager 6 Outlet	75
PowerManager SNMP for Novell	139

American Power International

American Power SmartUPS 600	428
BackUPS 250i/400i /600i	139/209/299
BackUPS 900i/1250i	479/610
SmartUPS 600/900 Net	439/599
SmartUPS 1250/2000 Net	729/1165
BackUPS 280/420 Pro	155/239
BackUPS 650 Pro	329
SmartUPS 250i/500i/900i	279/429/649
SmartUPS 1250i/2000i	879/1379
Japanese SmartUPS 600/900	428/799

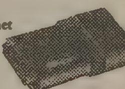
$25,000 Equipment Warranty by Manufacturers- Details Available

ADAPTERS

3COM 3C503 Etherlink II BNC ea/5+	179/159
3COM 3C509B Etherlink lll BNC ea/5+	125/109
3COM 3C509B Etherlink lll BNC 20 pk	1989
3COM 3C509B Combo BNC/RJ45 ea/5+	139/119
3COM 3C509B Combo BNC/RJ45 20 pk	2169
3COM 3C509B Combo BNC/RJ45 60 pk	5.995
3COM 3C579 EISA BNC	249
Intel EtherExpress 1 6 ea/5	115/109
Intel EtherExpress Flash BNC ea/5+	129/119
Intel Ether PRO BNC & RJ45 ea/5+	129/11 9
SMC Ethercard 16 BNC ea/6	99/89
SMC Ethercard Elite/a Microchannel BNC	199
SMC EtherEZ 1 6 Bit BNC ea/5	112/95
SMC Ultra 16 Combo ea/6	119/99

NOTEBOOK ADAPTERS

"Connect your IBM Compatible to Novell or Artisoft Networks without an expansion slot. Attaches to parallel port. Novell and Artisoft certified, requires AL or NDIS for Artisoft."



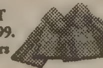
Silicom Pocket Ethernet
$159 each
3 or More
$149 each

Standard Features for 10BaseT or COAX:

• Interface to computer via parallel port • No I/O slot requirement • No Configuration switch and jumper settings • Plug-and-play solution for notebook networking • Instant installation • Compact and lightweight • Works with popular network software including NetWare, TCP/IP, and PC-NFS • Self-diagnostic program • Diagnostic LED Indicators

Parallel Port Adapters

D-Link DE620 Pocket Ethernet BNC	169
D-Link DE62OCT Combo BNC & RJ45	169
Silicom SET+ Pocket BNC	159
Silicom SET+ Pocket RJ45	159
Silicom SET+ Pocket BNC & RJ45	179
Silicom STR Pocket TokenRing 1 &3	299
Xircom Pocket LAN Adapter lll BNC	289
Xircom Pocket LAN Adapter lll RJ45	289



D-Link DE-650T
PCMCIA RJ45 $199.
PCMCIA Adapters

D-Link DE-650C PCMCIA Combo	299
Eagle NE200C PCMCIA BNC	249
Eagle NE200T PCMCIA RJ45	219
IBM PCMCLA TokenRing 16/4	399
Silicom PCMCIA Ethernet BNC	169
Silicom PCMCIA Ethernet w/l MB Ram	289
Silicom PCMCIA Ethernet RJ45	159
Silicom PCMCIA Ethernet BNC & RJ45	179
Xircom Performance PCMCIA RJ45	275
Xircom Performance PCMCIA BNC & RJ45	329

10 Base T Products

10 BaseT HUBS

- 16, 12, or 8 RJ45 Ports
- 1-BNC Port-Coax
- 1 -AUI Port
- LINK+ Rx LEDs
- IEEE 802.3 Ethernet Compliant Repeater

16 PORT....$429
12 PORT....$369
8 PORT......$199

HUBS

3COM Linkbuilder 12 Port Hub	359
3COM Linkbuilder FMS II 12 Port	639
3COM Linkbuilder FMS II 12 Port Mgmt	995
Accton 8 + 1 Port 110/220 VAC	219
Boca 8 Port Hub + 4 Adapters	339
Boca 12 Port Hub	289
DLink DE-1600 12 Port w/SNMP	949

SMC HUBS
Tigerhub 6 Port Hub $219
Tigerhub 12 Port Hub $449
Elite 3812 12 Port Hub $699

Hewlett Packard AdvanceStack 12	649
Hewlett Packard AdvanceStack 24	1079
Hewlett Packard AdvanceStack 48	1999
Hewlett Packard 8 Port EtherTwist	279
Hewlett Packard 48 Port EtherTwist	579
Synoptics 2800A	599
Synoptics 2813-04 16 Port/4 exp port	1649

CABLING

CAT-5 10BT

3ft patch cord	8
7ft patch cord	10
10ft patch cord	13
14ft patch cord	16
25ft patch cord	24

THICKNET
Office transceiver cable-molded

1ft	16
2ft	16

Standard transceiver drop cable

25ft PVC	72
50ft PVC	109
100ft PVC	183
25ft Plenum	117
50ft Plenum	198
100ft Plenum	360

THINNET
10 Base-2 coaxial cable

10ft male to male	10
20ft male to male	14
30ft male to male	19
50ft male to male	29
BNC T Adapter	4
BNC 50 OHM Terminator	4

TOKEN RING

DB-9 male end, 8ft type 6 cable, terminated with type C data connector	26
Type 3 media jumper cable	
13ft	14.00
4/16 Mbps type 3 media filter	41

Novell Certified Power Server

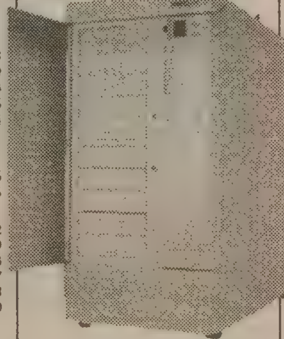
Dual Redundant

Hot Swapable Power Supplies!

Standard Features

- Pentium® 90MHz PCI Bus
- 32MB RAM
- 2-1.0GB SCSI Hard Drive Duplexed
- 2 Duplexed Fast SCSI PCI Controllers
- SVGA Card
- Mono VGA Monitor
- Keyboard
- Ethernet PCI Controller
- 2 GB DAT Tape Drive
- 4 SPEED CD ROM

$6895



Novell Certified NetWare Engineer

2 on staff

Urgent Care

- Same Day Shipping
- Overnight shipping available

CALL TODAY AT:
1-800-526-8735

LAN TREK NETWORKS, INC. • ONE KEARNY STREET, SUITE 601 • SAN FRANCISCO, CALIFORNIA 94108
TEL (415) 288-6777 • FAX (415) 288-6767

All logos belong to their respective companies. Prices subject to change w/o notice. Not responsible for typographical errors.

MasterCard VISA

1-800 LAN TREK

File

Printer, Desktop, Laptop & PC Repair Specialists

• IBM • Macs • SVGA • VGA • CGA • EGA • Monochromes • Multi-Syncs

advantix inc

REDWOOD CITY 1757 East Bayshore Rd. Suite 22

Factory Authorized Repair Center

Samsung • Zenith • Radius
Sigma Design • Mitsubishi

• FREE TUBE REJUVENATION
• FREE ESTIMATE • FREE DEGAUSSING
• VOLUME DISCOUNT AVAILABLE • LOANERS AVAILABLE

One Year Warranty On Any Repaired Unit(s)

Tel 415 • 363 • 1225 Fax 415 • 363 • 0685

1 800 • 553• 5703

Edit

Printer, Desktop, Laptop & PC Repair Specialists

We Deliver And Install

One Year Warranty On Any Repaired Unit(s)

ComputerCare

MOUNTAIN VIEW 2455 Old Middlefield Way, Suite M

Authorized Repair Center OKIDATA EPSON

HEWLETT PACKARD COMPAQ TOSHIBA IBM Business Partner

• Tel 415/967-8186 • Fax 415/967-6945

• 1 800 67/CARE/4
2 2 7 3

Computer Rescue
Staffed with highly skilled, qualified technicians, ComputerCare will diagnose and treat your machine's problem accurately and promptly.

Warranty Service
ComputerCare provides warranty and post warranty service.

Service Contracts
We loan you equipment while we repair yours. Please call us for a plan customized to best suit the needs of your company

Other Services Available
- In Shop Service
- On Site Service
- Overnight service

SMALL OFFICE/HOME OFFICE • BY BIRRELL WALSH

"Then Just Convert The File..."

The Joys Of Multiple File Types

You think your job is done.

You have been working in WordPerfect, and your client needs the information in Microsoft Word format. Or you have a .bmp graphic from Windows Paint, and you need to give it to someone as a TIFF file for their Macintosh.

"That's no problem," you think, "I'll just convert the file..."

But you are facing more trouble than you think. You are entering the world of file conversions. As we depend more on the Internet, exchanging files with people who work on Windows, DOS, Macintosh, and UNIX platforms, we spend more time between the worlds.

You may soon remember that the Greeks said the god Hermes, the interpreter who leads souls between the worlds, was the patron of thieves and of merchants. At every border between programs and systems, something may be lost—your time, your formatting, and mostly your patience. But there is opportunity as well, to do a little business at these borders.

Take My File, Please!

Early this year, my editor and I spent a harried couple of days dealing with translation problems. A file which I was sending her was arriving in garbled form. There were four systems involved, and therefore three conversions: from a Mac laptop, to my Windows system, to The WELL's UNIX system, to *MicroTimes*' Macintosh layout software.

Each piece of software worked pretty well. The problem turned out to be in none of the systems. The problem was in the conversions. And in many ways, my problems were typical of the kind of disasters that can confront any small contractor.

If you are running a small business with no extra time, each of these conversion bottlenecks can result in real problems. I had allotted a certain amount of time to finish that column. Other projects got delayed. I was annoyed and inconvenienced, but I was stuck—I had to solve the problem.

The first stage in this unwelcome detective work was to talk some more to the receiver. The editor gave me a description that I could understand but not explain: odd carriage returns at inappropriate places. The next stage was to look at the original files. Everything seemed fine. The third stage was to talk with an anonymous but excellent tech at The WELL. He discovered part of the problem: A stray control character, scattered through the document.

I thought I had found the trouble. But when I reopened the document in Microsoft Word for Windows, I could see no such control characters.

The story goes on, but here is the punchline. I had written a first draft on my Mac laptop, and edited the document later in Windows. The program I was using on the Macintosh laptop used only a carriage return (ASCII 13, or Control-M) to mark a hard return. My Windows system wanted a carriage return (ASCII 13) plus a line feed (ASCII 10). Word for Windows was ignoring the lonely Control-M's, and did not display them on the screen for me to catch while I did my multiple re-edits in Windows. They were still in the text, though; and when the document returned to a Macintosh environment the Control-M's were causing bogus carriage returns.

If your eyes are crossed at this point, Hermes the Trickster has cast his spell over you. But my mini-disaster is a good model for the griefs of translation.

Translating A Document Means Trouble

There is no way to guarantee that what you have created will get to another person in the form you created it. Even successful translations mean that the output is different from the input. Colors may be lost or modified in a graphics file. The recipient system may not have a font you used, and will substitute a generic font.

If it is any comfort, the problem reaches beyond the computer world. Linguists tell me that it is almost impossible to translate the English word "fun" into other languages. Anyone trying to explain America's culture of "fun" has to resort to awkward explanatory restatements. "*Well*, it is sort of an amusement that gives pleasure and is

> **You are entering the world** of file conversions. As we **depend more on the Internet,** exchanging files with people who **work on** Windows, DOS, Macintosh, and UNIX platforms, **we spend more time between the worlds.**

not necessarily (but may be) humorous..." and so on. Every translation is a paraphrase.

The same problems arise in translating from one computer file-format to another. Some databases, such as the old Paradox 3.5 file format, had only short text fields. dBASE files have had memo fields for much longer text. If one wishes to convert from a dBASE file to an old-style Paradox file, what becomes of the long memos? Something is lost.

Coping With Translations

Years of frustration and success have led me to some Rules of Thumb:

•*Leave Time to Translate.* You must assume that any translation of any document is a possibly profound bother. This means that you cannot allot all your time and resources to document creation. If you need to convert what you have created, time and effort must be allowed for the translation.

"Transmission" is a kind of translation, so allow for trouble if you have to fax or email your work.

If you have no trouble, you gain back the time you have allotted to the possible problem. If there is a problem, you have the wherewithal to deal with it.

•*Converting Systems Means Big Trouble.* If the translation of a document is a problem, changing systems is a nest of grief.

As a reviewer, I change systems frequently. I can tell you that it is never easy. Some old features are lost—I have never found a Windows outliner as responsive as the old DOS outliner GrandView, from Symantec. Habits you have learned become outmoded. If you're a WordPerfect user who's migrated to Word for Windows, you know how many times you've reached for the function keys before recalling that now you must use menus. Some programs (Word for Windows among them) even provide transition macros to allow you to keep your old habits for a while—but you must eventually learn new ways.

Every time you change systems, whether just a software package or a complete operating system, all your documents from the old environment may need translating. This means that in addition to learning the new system and unlearning the old, you must convert all the work you have done into new formats.

It is often worthwhile to change software. It is just not a trivial job. Be prepared: allow time, and lay in some aspirin.

•*The Number of Translation Problems Grows Faster Than the Number of Programs Involved.* Every time you add a new software package to a system, you create a whole new *family* of translation problems. If you add the Whiz-Bang Notetaker to a system with MS Word, Excel, and Microphone III, you don't add just one translation problem. You add six. There are three conversions possible in rendering from Whiz-Bang to the other products, and three in translating from the others to Whiz-Bang. With more components, the problem grows dramatically.

Networking, Multitasking & Connectivity Specialists

"Your One Call Service and Support Center"

NOVELL. Authorized Dealer · SCO OK · SunSoft A Sun Microsystems, Inc. Business · Microsoft. WindowsNT.

- Authorized Reseller for Novell, SCO UNIX, SCO Open Desktop, and SCO Open Enterprise System. Authorized Sunsoft dealer.
- Certified Novell engineers (CNE) on staff.
- We carry a full line of hardware and software solutions for SCO, Novell & Windows NT systems.

We specialize in Systems Design and Implementation. We offer complete Turnkey multiuser, multitasking solutions under Novell, SCO & Sunsoft. Our super servers can support up to 1 GB RAM, multiple Pentium 90 Processors and RAID5 Disk Arrays.

We can network EISA & PCI systems for small office to unlimited users in local and in wide area.

We provide onsite service and Maintenance.

AMI · intel

Complete Small Office Systems

AMI Pentium 60, PCI $1795
AMI Pentium 90, PCI $2195
INTEL Pentium 66, PCI $1695
INTEL Pentium 90, PCI $1995

Lifetime Support

Above systems Include: 8MB RAM, 530MB Hard Drive, Diamond Stealth w/1MB, 1.44 Floppy Drive, Non-Interlaced 14" SVGA Monitor, 101 Keyboard, Mouse, DOS 6.22, Windows 3.11, Mid-tower Case, Lifetime Technical Support and 5 Year Labor Warranty

NOVELL. GroupWare · INFORMIX · EQUINOX · DigiBoard · TOSHIBA

ALR Advanced Logic Research, Inc. **...Fastest Pentium Available** - PC World

Evolution VQ-90
16/540
$6295

Revolution Q-SMP-90
(Supports up to 4 processors)
16/540
$6995

Above systems Include: 16MB RAM, 530MB Hard Drive, Diamond Stealth 64 w/1MB, 1.44 Floppy Drive, Non-Interlaced 14" SVGA Monitor, 101 Keyboard, Mouse, DOS 6.22, Windows 3.11, Full-tower Case, Lifetime Technical Support and 5 Year Labor Warranty.

We carry the complete line of ALR Products. Call for complete information and pricing!

Complete Multimedia Systems with 4X Speed CD-ROM, Speakers, & 10 Titles!

Pentium PCI 90 .... $2195
Pentium PCI 60 .... $1995
486DX2-66 .... $1695

Lifetime Support

Above systems include: Intel CPU, 8MB RAM, 530MB IDE Hard Drive, 1.44MB Floppy Drive, Diamond Stealth 64 w/1MB, 14" Non-Interlaced Monitor, Mouse, 101 Keyboard, 16-Bit Sound Card, Stereo Speakers, Double Speed CD-ROM, 10 SoftwareTitles, DOS 6.22, Windows, Mid-Tower Case, Lifetime Technical Support, 5 Years Labor Warranty

HEWLETT PACKARD Authorized Dealer
Printers

540 .... $295
560C 495
4P 945
4+/4M+ 1395/1895
4V/4MV 1895/2695
4si/4siMX .... CALL

510-906-1690
comsysun@ix.netcom.com
Fax (510) 906-1699
1554 Newell Avenue • Walnut Creek, CA 94596
Prices subject to change without notice.

Computer Systems Unlimited
Complete System & Enterprise Wide Networking Solutions
"Your One CAll Service and Support Center"

JDR Microdevices®

EPSON ActionNote 4SLC2/50 Notebook Computer

- 50MHz 486SLC2 clock-doubled processor / 4 Meg RAM / 260 Meg IDE
- 3.5" 1.44 Megabyte Floppy Drive / External LPT-COM-VGA-KBD I/O ports
- 9.5" Monochrome 640x480 LCD Display / Internal Fax/Modem w/ SW
- Microsoft DOS V6.22 and Windows V3.1
- Weighs just 5.5lb with battery installed
- Includes Carrying Case & 1-Yr. Warranty

$1099

Limited Quantities

Microsoft

an American original

The Microsoft Serial Mouse

$19.95

Drop by our Catalog Outlet for a FREE copy of our

SPECIAL EDITION

Catalog #45 PC/Electronic Components Edition. You'll want to keep this edition as your reference!

Seagate

1.05 Gigabyte 15ms Fast SCSI-2 Drive

- only 2 available at this price

$349.95

POWER SAVER

allows you to have an Energy-Star type system setup without having Energy-Star compliant hardware

$19.95

TECH SPRAY

Dusting Gas
Cleaner / Degreaser
Flux Remover
Contact Cleaner

20% Off

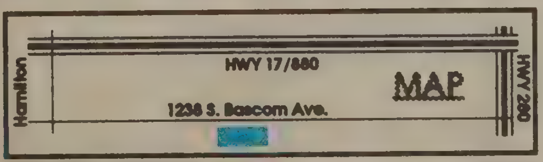
Hot Buys on Refurbs & Returns!

Don't miss out on these incredible values. Each week, our Catalog Outlet receives items from our mail-order warehouse that we sell at huge discounts. These products are customer returns and refurbs that carry a 30-Day Money-Back Guarantee and 6-Month Warranty. Look for our "Hot Buys!" ads each week in the Computing Section of the San Jose Mercury News.

Serving you since 1979

JDR Microdevices®
CATALOG OUTLET

1238 South Bascom Avenue San Jose CA 95128
Phone: 408-280-7144 Fax: 408-947-8234



Prices listed in this ad are good for our MicroTimes readers at our Catalog Outlet only. Prices are subject to change without notice. Limited quantities. Expires 5/31/95.

DISCOVER · AMERICAN EXPRESS · VISA · MasterCard

CATALOG OUTLET HOURS:
Monday-Friday - 9:00-7:00
Saturday - 9:00-5:00
Sunday - 12:00-4:00

Small Office, Home Office *continued...*

There are even calculations for all this. If you add new software to a system with *n* components, the number of new translations you may face is 2 times *n*. That is, if there are five components, you may have ten new translations to face if you add a single new piece of software. That's in addition to all the other translations you are already dealing with. The total number of translations you may confront in a system with *x* different packages is—ready for this?—*x* squared minus *x*. Yes. If you have six packages, you can have six squared minus six, which is (36 – 6) or thirty different translations to face.

This can make you think twice about adding new software to a system.

•*The System Is Your System, Plus Their System, Plus Everyone in Between.* It was not just my software that was involved. It was mine, the client's, and the service that connected us. If someone else changes systems, suddenly *you* can have problems.

•*Nobody's Help Department Is Responsible for Translation Problems.* I once designed a complex system to read incoming faxes aloud. It used a modem, a fax package, a voice synthesis device, and a programming language.

When I started having problems receiving the faxes, neither the modem company nor the fax-software manufacturer would take responsibility. It was not that they were ducking, exactly. They just felt that whatever the problem was, it must have been caused by the other manufacturer's product.

Because they knew I was a writer, both companies put extra effort into the job. One of them finally found a solution—an obscure option in their own program was at fault. But would the average user have gotten this much attention? This leads to the unfortunate fact that...

•*If No One Else Is Responsible for Translation Problems, You Are.* You are responsible when a client can't figure out how to open a package you've sent. As far as they are concerned, it is not delivered until it is usable for them. They do not want to hear "Some assembly required." They want to be able to use it right away.

This means that you need to be proactive about translation problems. You will end up dealing with them one way or another. Taking the initiative is the best approach.

The Hermetic Table:

If "x" is the number of software packages you use, *plus* the number your transmission service uses, *plus* the number your client uses, this is the number of translations possibly necessary:

Packages	Translations
1	0
2	2
3	6
4	12
5	20
10	90
15	210
20	380

continued on page 76

AT&T

AT&T
Technical Education Center

UNIX®/Open Systems,
Communications & Internet Courses
for UNIX Software Developers, Administrators and Users, Data Communication Managers, Research, Developers and Network Users.

UNIX/OPEN SYSTEMS COURSES	Date	Days	Course #
Fundamentals for Users	5/8	5	UC1070
Programming in C Language	5/15	5	IE5142
C Language Structure and Pointer	5/22	3	IE5143
AT&T UNIX System V Release 4 Admin	6/5	5	UC1097
Object Oriented Programming in C	6/12	5	UC1060
UNIX System V Release 4 Internals	6/19	5	UC1057
Informix-4GL-Application	6/26	5	UC5205
Shell Command Language for Programmers	7/10	5	UC1004
Intro. to Client/Server Computing in Open Environment	7/17	2	053410
COMMUNICATIONS TECHNOLOGIES COURSES			
Basic Telecommunication Principles and Network Engineering	5/8	4.5	TC6179
Data Communications II	5/22	3	UC4114
Multimedia Communications: Technologies, Systems and Services	11/10	1	DC2001

CERTIFICATION PROGRAMS
Ask about our UNIX System/C Programmer, UNIX Administrator & High Speed Networking programs

CALL FOR PROJECT MANAGEMENT COURSES
For Course Descriptions, Pricing, and On-Site Training,
call Adrian Kendrick 510-224-3929.
Learn from a company that uses the most advanced technology to run its
business—with training available in the San Francisco area at
4440 Rosewood Dr. in Pleasanton, CA.

To Enroll or for Further Information Call
1-800-TRAINER, Prompt 1, ext. 6564
1-800-872-4637
UNIX is a registered trademark of UNIX Systems Laboratories, Inc.

NOVELL SOFTWARE

NetWare 3.12 5/10 User	515./1,179.
NetWare 3.12 100/250 User	2,675./Call
NetWare 4.1 5/10 User	525./1,279.
NetWare 4.1 25/50 User	1,859./2,279.
NetWare 4.1 training Course 520	$476
Lantastic 6.0 5 User / 10 User	139./249.
SMC Ultra 10Base-T, BLOWOUT	$49. (qty. 5+)

Call for Hubs, Training kits, & LAN Books.

Custom Built File Servers, and PC's.
Ask about our 800 Mbps PCI File Servers!

Pentium Intel Plato w/Neptune chip set
w/3 PCI slots, 90MHz CPU ....only $750

Novell CNE

Call us for
all of your
LAN Inquiries

InTech
714-589-0164

Hands-on Hardware Training

Call Now for brochure & schedule

• PC Hardware Fundamentals	$225
• 2-Day PC Trouble Shooting	$425
• 2-Day Network Hardware	$425
• Modem-Communications Trouble Shooting	$325
• HP Laser Printer Repair	$425

Class size is limited to six participants

(510)-836-2040

EXCEL MICRO SOLUTIONS
1730 Franklin St, Oakland CA
Luis Lopez, Owner

YOUR #1 HARD DRIVE SUPER SOURCE

Quantum

1GB *FAST SCSI-3**

MODEL # EMP2100S

GB Capacity Fast SCSI-3* !
w PRML: For Faster Data Throughput!
t Average Seek Time of 9.5 ms !
2KB Cache Buffer, 5400RPM !
e Year Full Factory Warranty !
CSI-3 Support (50 Pin) - SCSI-3 SPI Compliant

$899

HARD DRIVES......

Quantum

QUALITY STORAGE

MAVERICK IDE & SCSI-2 SERIES

MB	IDE	QM30270MVA	14ms	$179
MB	IDE	QM30540MVA	14ms	$219
MB	SCSI	QM30540MVS	14ms	$228

THUNDERBOLT IDE DRIVE

MB	IDE	QM30420LPA	12ms	$199

LIGHTNING IDE & SCSI-2 SERIES

MB	IDE	QM30365LTA	11ms	3.5"x1"	$189
MB	IDE	QM30540LTA	11ms	3.5"x1"	$229
MB	IDE	QM30730LTA	11ms	3.5"x1"	$279
MB	SCSI	QM30365LTS	11ms	3.5"x1"	$199
MB	SCSI	QM30540LTS	11ms	3.5"x1"	$229
MB	SCSI	QM30730LTS	11ms	3.5"x1"	$299

TRAIL BLAZER SERIES

				INT	EXT
MB	30420TRA	12ms	Fast ATA-2	$199	$299
MB	30420TRS	12ms	Fast SCSI-2	$219	$319
MB	30850TRA	12ms	Fast ATA-2	$309	$N/A
MB	30850TRS	12ms	Fast SCSI-2	$319	$419

FIREBALL FAST ATA-2 & FAST SCSI-3* SERIES

MB	30540FBA	12ms	Fast ATA-2	$229	$329
MB	30540FBS	12ms	Fast SCSI-3	$245	$339
GB	31080FBA	12ms	Fast ATA-2	$359	$N/A
GB	31080FBS	12ms	Fast SCSI-3	$399	$499

EMPIRE FAST SCSI-2 SERIES

GB	EMP1080S	9.5ms	3.5"x1"	$599	$699
GB	EMP2100S	8.9ms	3.5"	$929	$1029

ATLAS FAST SCSI-2 SERIES

B	XP32150S	8ms	7200RPM	$979	$1079
GB	XP34300S	8ms	7200RPM	$1539	$1639

Grand Prix FAST SCSI-3* SERIES

B	GP32151S	8.6ms	7200RPM	$1089	$1189
8GB	GP34301S	8.6ms	7200RPM	$1449	$1549

t SCSI-3 Support (50 Pin) - SCSI-3 SPI Compliant

Maxtor

IDE & ENHANCED IDE DRIVES

0MB	7420AV	12ms	3.5"x1"	$185
0MB	7540AV	12ms	3.5"x1"	$199
0MB	MXT540A	8.5ms	3.5"x1"	$298
0MB	7850A	12ms	3.5"x1"	$245
GB	71050A	<12ms	3.5"x1"	$365
2GB	71260A	<12ms	3.5"x1"	$385

ENHANCED IDE

CONNER

The Storage Answer

IDE & ENHANCED IDE DRIVES

20MB	CFS420A	14ms	3.5"x1"	$179
40MB	CFA540A	12ms	3.5"x1"	$199
50MB	CFA850A	<12ms	3.5"x1"	$258
27GB	CFA1275A	12ms	3.5"x1"	$359

ENHANCED IDE

FAST SCSI-2 DRIVES

				INT	EXT
0GB	CFP1080S	<12ms	3.5"x1"	$469	$569
1GB	CFP2105S	<9ms	5400RPM	$939	$1039
1GB	CFP2107S	<9ms	7200RPM	$1059	$1159
2GB	CFP4207S	<9ms	7200RPM	$1469	$1559

Seagate

2.1GB *FAST WIDE*

MODEL # ST12550W

- 2.1GB Capacity Fast WIDE SCSI-2 !
- Highest Performance 3.5" discs!
- Fast Average Seek Time of 8ms !
- 1024KB Cache Buffer, 7200RPM !
- Five Year Full Factory Warranty !
- EXTERNAL UNIT ... $1468

$1188

HARD DRIVES......

Seagate

IDE & ENHANCED IDE DRIVES

FAST ATA

170MB	ST3195A	14ms	3.5"x1"	$149
341MB	ST3391A	13ms	Fast ATA	$219
428MB	ST3491A	14ms	Fast ATA	$199
545MB	ST5660A	12ms	Fast ATA-2	$288
850MB	ST5850A	11ms	Fast ATA-2	$279
1.0GB	ST31220A	12ms	Fast ATA-2	$345

FAST SCSI-2 DRIVES

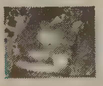
				INT	EXT
545MB	ST5660N	12ms	3.5"x1"	$329	$429
1.0GB	ST31230N	10ms	3.5"x1"	$519	$619
1.0GB	ST31250N	8.5ms	3.5"x1"	$739	$839
1.0GB	ST31200N	9ms	3.5"x1"	$559	$659
2.1GB	ST32430N	10ms	3.5"x1"	$899	$999
2.1GB	ST32550N	8ms	3.5"x1"	$1039	$1139
4.3GB	ST15150N	8ms	3.5"	$1499	$1599
4.3GB	ST15230N	9ms	3.5"	$1299	$1399
9.0GB	ST410800N	11.5ms	5.25"	$2899	$3099

Seagate

WIDE SCSI DRIVES

2.1GB	ST31230W	10ms	3.5"x1"	$699	$979
2.1GB	ST12550W	8.9ms	3.5"	$1188	$1469
2.1GB	ST32550W	9ms	3.5"x1"	$1239	$1529
4.1GB	ST15150W	8ms	3.5"	$1619	$1899

HEWLETT PACKARD



FAST SCSI-2 DRIVES

				INT	EXT
1.05GB	C3323A	10.5ms	3.5"x1"	$559	$629
1.2GB	C3724A	10ms	3.5"x1"	$Call	$Call
2.1GB	C2490	8.9ms	3.5"	$999	$1099
2.17GB	C3725S	*NEW*	3.5"x1"	$1029	$1129

FUJITSU

IDE PicoBird Series

530MB	M2684TAU	12ms	3.5"x1"	$195

SCSI-2 PicoBird Series

				INT	EXT
530MB	M2684SAU	12ms	3.5"x1"	$219	$319
1.0GB	M1606SAU	10ms	3.5"x1"	$569	$669

FUJITSU

NEU!

WIDE SCSI DRIVE

1.0GB	M2694EQA	10ms	WIDE	$669	$939

IBM

IDE DRIVES

728MB	70G8850	12ms	3.5"x1"	$255
1.0GB	DPEA-31080	12ms	3.5"x1"	$399

FAST SCSI-2DRIVES

				INT	EXT
540MB	94G2646	12ms	3.5"x1"	$239	$339
728MB	94G2647	12ms	3.5"x1"	$288	$388
1.0GB	DPES-31080	10.5ms	3.5"x1"	$529	$629
2.0GB	94G3054	7.5ms	7200RPM	$1199	$1299
4.3GB	94G3057	8.5ms	7200RPM	$1839	$1939

MICROPOLIS

9.1GB *FAST SCSI-2*

MODEL # MC1991

- 9.09GB Super-Capacity Fast SCSI-2 !
- Enhanced Features for Improved Performance !
- Fast Average Seek Time of 12ms !
- 512KB Cache Buffer, 5400RPM !
- Five Year Full Factory Warranty !
- EXTERNAL UNIT .. $2679

$1188

HARD DRIVES......

MICROPOLIS

IDE DRIVE

1.75GB	MC2217A	10ms	3.5"	$689

FAST SCSI-2 DRIVES

				INT	EXT
1.0GB	MC4110	8.5ms	3.5"x1"	$599	$699
1.75GB	MC2217	10ms	3.5"	$899	$999
2.0GB	MC3221	8.5ms	3.5"	$1069	$1169
2.0GB	MC4221	8.5ms	3.5"x1"	$1099	$1199
3.0GB	MC1936	13ms	5.25"	$1049	$1249
4.0GB	MC3243	8.5ms	3.5"	$1549	$1649
9.1GB	MC1991	11ms	5.25"	$2759	$2959

MICROPOLIS

AUDIO VISUAL SCSI-2 DRIVES

				INT	EXT
1.75GB	MC2217AV	10ms	3.5"	$999	$1099
2.0GB	MC3221AV	8.5ms	3.5"	$1189	$1289
2.0GB	MC4221AV	8.5ms	3.5"x1"	$1199	$1299
3.0GB	MC1936AV	13ms	5.25"	$1349	$1549
4.0GB	MC3243AV	8.5ms	3.5"	$2099	$2199
9.1GB	MC1991AV	11ms	5.25"	$3249	$3449

WESTERN DIGITAL

IDE & ENHANCED IDE DRIVES

420MB	WDAC2420	13ms	3.5"x1"	$209
540MB	WDAC2540	12ms	3.5"x1"	$245
730MB	WDAC2700	10ms	3.5"x1"	$249
850MB	WDAC2850	<10ms	3.5"x1"	$269
1.0GB	WDAC31000	<10ms	3.5"x1"	$369
1.28GB	WDAC31200	<10ms	*NEW*	$359

ENHANCED IDE

SAMSUNG

Electronics

IDE & ENHANCED IDE DRIVES

251MB	SHD-3122A	16ms	3.5"x1"	$179
280MB	SHD-30280A	12ms	3.5"x1"	$185
426MB	SHD-3212A	13ms	3.5"x1"	$199
561MB	SHD-30560A	12ms	3.5"x1"	$229

PORTABLE SOLUTIONS

backpack

BY MicroSolutions Computer Products

NEU!

MSHD420	Backpack Hard Drive 420MB	$419
MSHD850	Backpack Hard Drive 850MB	$519
MSHD1200	Backpack Hard Drive 1.2GB	$Call

2.5" NOTEBOOK DRIVES

Seagate

209MB	ST9235AG	16ms	IDE	$279
340MB	ST9385AG	16ms	IDE	$299
455MB	ST9550AG	16ms	IDE	$389
540MB	ST9655AG	16ms	IDE	$449

Quantum

256MB	DY256AT	17ms	IDE	$259
514MB	DY514AT	17ms	IDE	$439
256MB	DY256S	17ms	SCSI	$269
514MB	DY514S	17ms	SCSI	$469

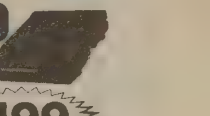
TOSHIBA

2.5" IDE & ATA-2 Drives

262MB	MK1724FCV	13ms	12.7mm	$235
352MB	MK1824FCV	13ms	12.7mm	$279
540MB	MK1924FCV	13ms	12.7mm	$409
704MB	MK2528FC	13ms	19mm	$559
810MB	MK2628FC	13ms	19mm	$599

iOMEGA

External for Mac, PC or Parallel for PC.



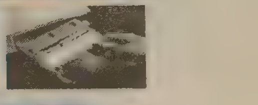
100MB Zip Removable Drive

- Small, Sleek & Portable Storage !
- Weighs about one pound !
- Can be used for fast and easy backups !
- Compatible with MAC and PC Computers !
- Includes Zip Tools™ Software to help find, track & organize your data.

$199

REMOVABLE DRIVES

SyQuest



REMOVABLE CARTRIDGE DRIVES

105MB	SQ3105S	Int/(Ext w/Cart)	$235/$379
270MB	SQ3270A	IDE for PCs	$335
270MB	SQ3270S	Int/(Ext w/Cart)	$339/$469
270MB	SQ3270S	Ext for MAC w/Cart & SW	$489
200MB	5200C	Int/(Ext w/Cart)	$359/$499
200MB	5200C	Ext for MAC w/Cart & SW	$519
270MB	SQ3270P	Ext for Parallel Port w/Cart	$619

NEU!

FEATURING SyQuest REMOVABLE TECHNOLOGY

SyQuest

REMOVABLE 16 BIT KITS FOR PC

Complete Kits Include: Internal or External Unit, 16 Bit IDE or SCSI Controller, Cart, Cables & Software.

270MB	SQ3270AK	Internal IDE KIT	$405
270MB	SQ3270SK	SCSI KIT INT/EXT	$499/$579
200MB	SQ5200CK	SCSI KIT INT/EXT	$545/$599

SyQuest Cartridges

			1Pc.	5Pk.
SQ400	44MB	5.25"	$48	$235
SQ800	88MB	5.25"	$54	$265
SQ310	105MB	3.5"	$58	$280
SQ2000	200MB	5.25"	$82	$399
SQ327	270MB	3.5"	$65	$315

OPTICAL DRIVES

Maxoptix

1.3GB Rewritable Optical Drives

			INT/EXT
Tahiti-4M	*1MB*	Cache buffer	$1779/$1969
Tahiti-4M	*4MB*	Cache buffer	$1949/$2069
Tahiti-3M	*1MB*	Cache buffer	$1979/$2169
Tahiti-3M	*4MB*	Cache buffer	$2049/$2249

1.3GB Cart (512 or 1024b Sector) Glass/Poly ..... $189/$149

HEWLETT PACKARD

Rewritable Optical Drives

C1716T	1.3GB 5.25" INT/EXT	$1959/$2149
C2550A	1.3GB 5.25" External	$2429
C1100A	20GB Ext Juke Box (20XT)	$4589

1.3GB(1024b/s) or 1.2GB (512b/s) cartridge $109

FUJITSU

DynaMO 2512A 230MB 3.5" Optical Drives

Internal/(External with cart)	$568/$799
EXTERNAL w/16 Bit Adapter & Cart for PC	$899
EXTERNAL w/Software, Cable & Cart for MAC	$929

RICOH

230MB & 1.3GB Rewritable Opticals

		INT / EXT
RO5061	1.3GB 5.25" Half Height	$1649/$1749

IBM

1.3GB Rewritable Opticals

62G0535	230MB 3.5" MO	$819/$939
06H5313	1.3GB 5.25" MO	$1949/$2199

Pinnacle Micro

Tahoe 230

The Next Generation of the First Portable Optical Drive

Tahoe230 MAC	Portable 230MB for MAC	$899
Tahoe230 PCT	Portable for PC (Parallel)	$1049
Tahoe230 PCA	Portable w/Adaptec Interface	$1089
Tahoe230 PCAN	Portable for PC (no Interface)	$869
Pak-Travel	Battery, charger & travel case	$195

Sierra 1.3GB

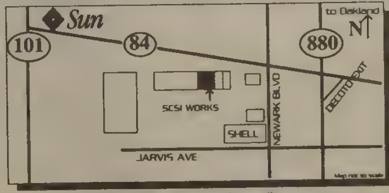
1.3GB Optical Drive Storage System

Sierra1.3 MAC	External 1.3GB for MAC	$2249
Sierra1.3 PC	External w/Adaptec Interface	$2399
Sierra1.3 PCAN	External for PC (no Interface)	$2289
Sierra1.3 PCI	Internal w/Adaptec Interface	$2249

(510) 494-8100

SCSI WORKS

COMPUTER PRODUCTS



6225 Jarvis Ave.
Newark, CA, 94560
M-F 6a-7p; Sat 9a-5p; Sun 10a-4p PST
FAX (510) 494-8501

CORPORATE DEPARTMENT

Corporate, Dealer, Government, Educational, & International

"Dedicated To Serving Purchasing Agents Worldwide!"

(510) 494-8100

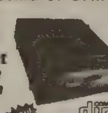
TECH SUPPORT (510) 494-8045 FAX (510) 494-8501

Electronic & Bank Contact Verification To Prevent Fraud
Full Cooperation with Police for all fraud Orders

© Copyright 1995 May MicroTimes ad. All rights are reserved. Prices and availability are subject to change. Not responsible for typographical errors
No reproduction, in whole or part, of any kind, allowed without prior written consent of TEC.

NEW!

AN EASY TO USE CD RECORDER/PLAYER THAT STORES UP TO 650MB OF DATA!



Recordable CD

Recordable CD-ROM that allows users to create multimedia titles, data backup archives and custom audio CDs.

IDE & EIDE CONTROLLERS

BUSLOGIC IDE CACHING CONTROLLERS

- High Performance w/Avg seek of 9.3ms.
- Auto IDE for easy setup.
- Uses standard 30Pin SIMMS-512KB up to 16MB.
- Disk Mirroring for 100% disk fault tolerance.

KT-410A	32-Bit VLB up to 20MB/sec 4HD to 4GB	$125
KT-510A	16-Bit ISA up to 5MB/sec 4HD up to 4GB	$95
KT-910A	32-Bit PCI up to 20MB/sec 4HD to 4GB	$168

PROMISE TECHNOLOGY, INC.

IDE & SCSI CACHING CONTROLLERS

EIDE2300+	Enhanced IDE VLB w/16550 IO & Ext BIOS	$69
EIDEMAX	16 Bit ISA CoExist w/BIOS up tp 8.4GB	$29
EIDE4030+	32 Bit VLB Caching 4HD+1 ATAPI CD-Rom	$169
DC200	16 Bit ISA 4HD/2FD2.88(up to16MB)	$89
DC200M	2FD/4HD ISA 512K(up to 8.5MB) 2.88 Support	$99
DC420VL	VLB 2HD/2FD 512K (up to 1MB)2S/1P	$99
DC440	BusMaster SCSI/IDE VLB w/IO	$189
DC4030VL2	4HD/2FD 19MB/S Transfer Rate 2.88 Support	$109
DC5030	BusMaster PCI IDE Caching Controller	$149
DC540	BusMaster PCI FAST SCSI-2 Controller	$Call

HDSS IDE CONTROLLERS

200	16Bit ISA 2HD/2FD Controller w/Cables	$12
211	16Bit ISA 2HD/2FD w/2Serial\1Par\1Game	$18
223	32Bit VLB 2HD/2FD 2S/1P/1G	$21
243	32Bit VLB 2HD/2FD 2S/1P/1G E-IDE	$49
400	16Bit ISA 2HD/2FD 2-16550S/1EPP/1G	$39
500	32Bit VLB 2H/2F 2-16550S/1EPP/1G E-IDE	$44
600	32Bit PCI 4H/2F 2-16550S/1EPP/1G E-IDE	$54
610	32 Bit PCI 2HD Enhanced IDE	$28

gsi *Increases Performance of IDE & Floppy Drives. Doubles the Transfer Rate on Floppy Tape Backups.*

NEW! MODE 3 & 4 VESA Extender Modules

1645-V1	Extends Any GSI ISA to full VESA 32Bit	$78
1645-V2	Supports 4 IDE on GSI ISA 2-IDE Channel	$128

HI PERFORMANCE ADAPTERS w/INTELLIGENT BIOS

11	8-Bit 4FD(2.88)-250MB Tape Accel Card	$49
18	16Bit 2HD Co-Exist w/IDE-MFM-ESDI-RLL-SCSI	$38
21	16Bit ISA BUS 2HD/4FD (2.88 Support)	$59
32	16Bit MultiPort IDE,Floppy,Tape,HiPerf. I/O	$99
4C	16Bit 4 Channel, 8IDE Drive accelerator	$149

Full Mode 3 & 4 Drive Support

2130	32-Bit PCI up to 11MB/S Transfer Rate	$29
2177	32-Bit VLB Caching 4HD up to 19MB/Sec	$119
2183	16-Bit 2HD Co-exist w/IDE-MFM-ESDI-RLL-SCSI	$19
2278	32-Bit VLB with MultiFunction I/O	$29
2280	16-Bit PC/AT IDE Super I/O 2S/1P/1G	$23

Acculogic

sIDE-1/16	8BIT PC/XT IDE CONT. W/BIOS	$38
sIDE-2	32-Bit PCI 2HD/ENHANCED IDE	$39
sIDE-3/Plus	16BIT 2HD/2FD IDE CONT. w/Smart BIOS	$48
sIDE4/VL	32-Bit 2HD/2FD(2.88) 16550 I/O VLB E-IDE	$89

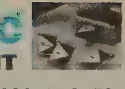
IDE Connectivity solutions with [illegible] for DOS & Windows.

IDE-CD	16-Bit IDE-16002 IDE CD-ROM KIT	$29
IDE-AT	16-Bit IDE-16030 AT VALUE PAK	$44
IDE-VL	32-Bit IDE-32000 VLB VALUE PAK	$85
IDE-PCI	32-Bit PCI-32100 PCI VALUE PAK	$68

Quick Technology

SIDEJr.L	32-Bit VLB,2HD/2FD, E-IDE, 2-16550 Serial,EPP and ECP, 2.88 Support	$48
SIDEPro	Similar to above w/BIOS,Dual Chnl 4HD/2FD,>528MB Support (Jumperless)	$55
SIDE-[illegible]	16-Bit ISA, 2HD/2FD,2-16550 Serial, Bi-Parallel w/EPP and ECP, 2.88 Support	$39
SIDE-2910	32-Bit PCI/E-IDE/Dual Chnl 4HD, up to 13MB/Sec, >528MB Support	$29
SIDE-2615	16-Bit ISA, Dual Chnl 4HD/2FD, 4-16550 Serial, 2x Bi-Parallel w/ECP-EPP	$85
SIDE-Gold	32-Bit VLB, Fast SCSI-2 >1GB & E-IDE >528MB Support, 2-16550 Serial, 1-Bi-Parallel w/ ECP-EPP, 2.88 Support. Jumperless w/Drivers	$119

adaptec NEW! APA-4510 KIT



Dual Slot ISA-to-PCMCIA Card Adapter for PCs

- Compatible w/virtually all PCs & PCMCIA Cards
- Dual Slot for 2 PCMCIA Cards
- Supports Type I, II & III Cards
- Easy operation with CardPark SW

$189

SCSI CONTROLLERS

adaptec

1505	16-Bit ISA Total-CD SCSI-2	$57
1515	16-Bit ISA Total-Connect SCSI-2 KIT	$89
1520	16-Bit ISA SCSI-2 7 Device CARD Only	$99
1522	16-Bit ISA SCSI-2 7 Device & 2FD KIT	$139
1542CFK	16-Bit BusMaster Fast SCSI-2 KIT/CARD	$239/$199
AMM-1570	Full SCSI ISA with Advanced Audio	$249
1640	16-Bit MicroChannel for PS/2,7HD KIT	$299
2742T	32-Bit TWIN-EISA KIT, 14HDs	$348
2742W	32-Bit WIDE EISA KIT w/WIDE CABLE	$379
2825VL	32-Bit VLB E-IDE/SCSI-2 KIT	$158
2842A-VL	32-Bit Fast SCSI-2 VLB KIT	$259
APA-1460	Slim SCSI PCMCIA KIT **NEW Release**	$199
APA-4510	CARD PARK -PCMCIA CARD Reader **NEW**	$178
2940	32-Bit PCI SCSI-2 KIT RISC-BASED I/O	$279
2940W	32-Bit PCI Wide KIT w/ WIDE CABLE	$349
3940	DUAL CHANNEL PCI CONTROLLER KIT	$409
3940W	DUAL CHANNEL WIDE PCI KIT **NEW**	$Call
3985	PCI RAID Adapter w/3 RISC-based Procs	$Call
T348	Parallel to SCSI Plus 250KB/S	$125
T358	Parallel to SCSI EPP 1MB/S	$158

BUSLOGIC

KT445C	32-Bit VLB Fast SCSI-2 KIT	$199
KT545C	16-Bit ISA BusMaster Fast SCSI-2 KIT	$209
KT742A	32-Bit EISA SCSI-2 KIT	$279
KT747C	32-Bit EISA Fast SCSI-2 KIT	$299
BT757S	32-Bit EISA Fast Wide SCSI Card	$349
SW-190	Software Drivers for BT757S	$45
KT946C	32-Bit PCI Fast SCSI-2 KIT	$255
KT956C	32-Bit PCI Fast Wide SCSI-2 KIT	$309

DPT Distributed Processing Technology *Super High Performance Caching/BusMastering Controllers*

SmartCache III & SmartRAID SCSI Adapters

PM2021	16 Bit ISA Bus Master Kit	$175
PM2022	32 Bit EISA Bus Master Kit	$299
PM2122	32 Bit EISA *High Performance*	$399
PM2024	32 Bit PCI Bus Master Kit	$269
PM2124	32 Bit PCI *High Performance*	$399

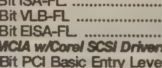
qlogic *Fast! SCSI-2 CONTROLLERS*

QLISA-CD	16-Bit ISA for CD ROMs	$49
QLISA/FL	16-Bit ISA-FL	$118
QLVLB/FL	32-Bit VLB-FL	$199
QLEISA/FL	32-Bit EISA-FL	$209
QLPCMCIA	*PCMCIA w/Corel SCSI Drivers*	$165
QLPCI-B	32-Bit PCI Basic Entry Level	$129
QLPCI-W	32-Bit IQ-PCI Wide SCSI-3	$279
QLPCI-10	32-Bit IQ-PCI Model 10 Narrow	$209

always technology NEW!

AL-3000W	32-Bit PCI FAST WIDE Up to 14 devices . *New*	
AL-3000	32-Bit PCI FAST SCSI-2	$199
IN2000	16-Bit SCSI-2 w/ASPI & BACKUP SW	$138
AL2400S	16-Bit Fast SCSI-2 w/ASPI & BACKUP SW	$148
AL2400SI	16-Bit Fast SCSI-2/2IDE/4FD & S/W	$159
AL6200	32-Bit Fast SCSI-2 Caching EISA w/SW	$669
AL7048	32-Bit FastSCSI-2 /2IDE/4FL/2S/1EPP	$279
ALRAID16	Two IN2000's w/ASPI,SCO,NW & Corel	$1199

DATA TECHNOLOGY



3150VN	8-Bit Kit-CD,Tape & Scanner Support No BIOS	$29
3270VL	32-Bit SCSI-2 VLB Kit	$95
3274	32-Bit FastSCSI-2 BusMaster VLB Kit	$169
3280	16-Bit Low Cost ISA SCSI-2 Kit	$115

FUTURE DOMAIN

TMC1610	16-Bit CD ROM KIT	$65
PNP1630	16-Bit SCSI w/PowerSCSI	$Call
TMC1660	16-Bit Value Pack No Floppy	$115
TMC1680	16-Bit Value Pack 7HD/4FD	$125
SCSI2GO	PCMCIA TYPE-II FastSCSI-2(10mb/s)	$219
TMC3260	32-Bit PCI VALUEPACK w/PowerSCSI	$199
MCS700	16-Bit Micro Channel w/PowerSCSI	$159
MCS7000	32-Bit EISA SVP(2 Floppy Support)	$369

Quick Technology

SIDE-2935	32-Bit PCI BusMaster Fast SCSI-2 Controller NCR 810 ChipSet	$65
SIDE-Gold	32-Bit VLB, Fast SCSI-2 >1GB & E-IDE >528MB Support, 2-16550 Serial, 1-Bi-Parallel w/ ECP-EPP, 2.88 Support. Jumperless w/Drivers	$119

PINNACLE MICRO

Recordable CD.

650MB Recordable/Playable CD

- *Model [illegible]™*
- *Double Speed 1MB Cache*
- *ISO 9660,HFS,Red Book Audio*
- *SW to Make Data,Audio&Video CDs*
- *For PC or MAC.* w/Controller for PC...$1929

$1889

MEMORY SIMMS & CPU'S

PC & MAC Memory

*** Call for Lowest Prices ****

1x3/60-70ns	1MB 3 Chip 30 Pin 60 or 70ns	$Call
1x9/60-70ns	1MB 9 Chip 30 Pin 60 or 70ns	$Call
1x8/60-70ns	1MB 8 Chip 30 Pin 60 or 70ns	$Call
4x9/60-70ns	4MB 9 Chip 30 Pin 60 or 70ns	$Call
4x3/60-70ns	4MB 3 Chip 30 Pin 60 or 70ns	$Call
1x36/60-70ns	4MB 72 Pin 60 or 70ns w/Parity	$Call
1x32/60-70ns	4MB 72 Pin 60 or 70ns No Parity	$Call
2x36/60-70ns	8MB 72 Pin 60 or 70ns w/Parity	$Call
2x32/60-70ns	8MB 72 Pin 60 or 70ns No Parity	$Call
4x36/60-70ns	16MB 72 Pin 60 or 70ns w/Parity	$Call
4x32/60-70ns	16MB 72 Pin 60 or 70ns No Parity	$Call
8x36/60-70ns	32MB 72 Pin 60 or 70ns w/Parity	$Call

intel.

486 & PENTIUM CPU's

DX33\DX2-66	$129\$165
DX2-50\DX4-100	$139\$269
P60\P66	$259\$305
P75\P90	$349\$539
P100/P120	$729\$1269

AMD 486 DX CPUs

DX2-50\DX4-100	$119\$229
DX2-66(3Volt/5Volt)	$135\$139
DX2-80(3Volt/5Volt)	$155\$179

Cyrix 486 DX CPUs

DX2-50	$99
DX2-66(5Volt)	$139

FLOPPY DRIVES

1.2MB	**TEAC** 5.25 " Floppy Drive	$46
1.44MB	**TEAC** 3.5" Floppy/with Bkt	$38/$43
1.2/1.44	**TEAC** Dual Floppy Drive	$93
1.2MB	**EPSON** 5.25" Floppy Drive	$43
1.44MB	**EPSON** 3.5"Floppy/with Bkt	$34/$39
1.2/1.44	**EPSON** Dual Floppy Drive	$89

RECORDABLE CD-ROMS

PINNACLE MICRO

Recordable CD-ROM Drives

Recordable CD.

RCD-1000 MAC	External with SW for MAC
RCD-1000 PC	External with SW for PC
RCD-1000 PC20	External w/Adaptec Interface

RICOH

RECORDABLE CD-ROM DRIVE

F21020	5.25" SCSI-2 INT/EXT	$2299/$2489

Smart and Friendly **CD-RECORDERS**

CD-R1002* High Performance At A Lower Cost

High Performance Double Speed Recorder with 1MB Cache

With Corel CD-Creator & Adaptec SCSI Card	$1659
With Gear Windows & Adaptec SCSI Card	$1999
With Gear for Macintosh	$1599
With SUN or HP Unix	$2899

CD-R2000* Dual-CD To Meet Any Need

High Performance Double Speed Recorder w/2MB Cache

With Corel CD-Creator & Adaptec SCSI Card	$2569
With Gear Windows & Adaptec SCSI Card	$2919
With Gear for Macintosh	$2419
With SUN or HP Unix	$3699

CD-R4000* For Those Who Need Warp Speed

512kB Cache Buffer, 17 Min Record Time!

With Corel CD-Creator & Adaptec SCSI Card	$3789
With Gear Windows & Adaptec SCSI Card	$4199
With Gear for Macintosh	$3639
With SUN or HP Unix	$4899

PLASMON

C·A·T·A·S·Y·S·T·E·M·S

CD Recorder Drive

- **Support a wide range of CD Formats.**
- **Twice the transfer rate of conventional CD Drives**
- **Configurable Buffer of up to 32MB to increase performance!**
- **Corel CD-Creator Pre-Mastering SW Included!**

RF4100	With 1MB Upgrade & S/W	$2349

PIONEER

THE HIGH SPEED CD-ROM MINI-CHANGER

- *Model DRM 602X*
- *300ms, 307KB/Sec*
- *256K Cache Buffer*
- *<5 Sec Disc change time!*

$388

DRM-604X 614KB/SEC... ...$779

CD-ROM DRIVES

PIONEER

THE HIGH SPEED CD-ROM MINI-CHANGER

- Instant access to six CD-ROM discs.
- Supports DOS, Mac, OS/2, Windows, VMS, Sun OS, Solaris & UNIX and all major networks (including Novell Netware).
- 2048/512 Byte Selectable For Workstations
- Reads all popular CD-ROM formats (including Kodak Photo CD)
- Includes Software for DOS/Windows & Macintosh. Plus a 6CD Magazine

DRM-602X	6-Disc 2X Speed 307kb/sec	$389
DRM-604X	6-Disc 4X QUADRASPIN™ 614kb/sec	$779
DRM-1804X	18-Disc 4X QUADRASPIN™ 614kb/sec	$1789
DRM-A600	6 CD MAGAZINE	$29

PIONEER NEW!

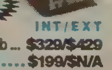
SINGLE DISC QUADRASPIN™ IDE & SCSI CD-ROMS

		INT/EXT
DR-U104X	240ms-614kb/sec-256K Cache	$329/$429
DR-U124X	240ms-614kb/sec-256K Cache	$329/$429
DR-UA124X	<150ms-614kb-128K Cache E-IDE	$199/$N/A

TOSHIBA

***NEW** QUAD SPEED IDE CD-ROM*

$199



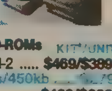
		INT/EXT
XM3501B	Quad-Speed 4X120ms/600kb	$329/$429
XM5302B	Quad-Speed 4X E-IDE	$199/$N/A
XM3601B	4.4X Speed 120msseek/660kb	$329/$429

MITSUMI

- 64KCache Buffer (Model FX-400B)
- 600KB/Sec Data Transfer Rate.
- MultiSession PhotoCD, XA, MPC2 Complient

FX-400B	Quad-Speed 4X E-IDE	$199

NEC



DATA & VIDEO CD-PLAYBACK CD-ROMs

		KIT*/UNIT
CDR401	3Xp Plus 240ms/500kb/SCSI-2	$469/$389
CDR50[illegible]	3Xi Triple Speed [illegible]ms/450kb	[illegible]79
CD[illegible]01	4Xi 220ms/600kb/SCSI-2	$469/$389
CDR601	4Xe 220ms/600kb/SCSI-2	$549/$489

*KIT Includes(16-Bit card &sw,Microsoft Encyclopedia)

PLEXTOR 4PLEX & 6PLEX *Lightning Fast CD-ROMs*

- 125-150ms Seek Time
- 600-900kb/sec Transfer Rate
- 256k-1MB Cache Buffer
- MultPlatform-PC,Mac,UNIX

		INT / EXT
PX-43CS/45CS	4-X, 256K Cache	$329/$409
PX-43CH/45CH	4-X,1MB Cache	$399/$499
PX-45CH MAC	4-X,1MB Cache Mac	$529
PX-63CS	6-X,145ms,900kb,256K Cache	$599/$399

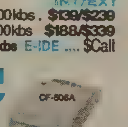
CHINON

High Performance CD-ROM Drives NEW!

- *Top Rated high quality CD-ROM Drives!*
- *64-256K buffer for enhanced performance!*

		INT/EXT
CDS-525	2X, 280ms,64kCache,300kbs	$139/$239
CDS-535	2X, 220ms,256kCache,300kbs	$188/$339
CDS-545	4X, 230ms,128kCache,600kbs E-IDE	$Call

TEAC SuperQuad 4X



- Standard 3.5" 1.44 Drive (M#CF-506A)
- 195ms,64K Cache,600Kb/sec
- Sound Blaster Compatible
- Easy to use Plug & Play.

$189 CD-55AB

CD-55AB	SuperQuad 4X AT Drive	$189
CD-55AK8	SuperQuad 4X AT KIT (8 Bit)	$209
CD-55AK16	SuperQuad 4X AT KIT (16 Bit)	$229
CF-506A	ComboQuad 4X CD w/1.44 Floppy	$298

NSM Information Systems

100 CD Jukebox

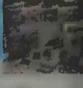
With 65GB of near on-line storage

Average Disc Change Time Under 5 Second

- [illegible]
- 256k cache Buffer!
- SCSI-2 Interface which allows up to Seven 100 disc changers to be daisychained

AUDIO & MULTIMEDIA KIT

DIAMOND MULTIMEDIA



COMPLETE MULTIMEDIA KIT

- High Quality Stereo speakers.
- Hot selection of the best selling CD titles. NEW
- 16-bit CD Quality sound card (Wave Table Upgradable)
- Mitsumi or Teac 4XCD(All kits except 1000)/Sanyo 2XCD(1000KIT).
- **Quickstart Video for HASSLE FREE Installations.**

M500	Int 4XCD+Compton's (No Sound card,spkrs or Video)	$2
M1000	Int 2X-CD,MIC&HeadPhone w/30Titles	$2
M3000	Int 4X-CD w/6 Educational Titles	$3
M4000	Internal 4X-CD-ROM & 11 Titles	$2
M5000	Int 4X-CD,MIC&HeadPhone w/30Titles	$4
M6000	Int 4X-CD w/6 Business Titles	$3

CREATIVE

CREATIVE LABS, INC.

Top Rated High Quality Creative Labs MultiMedia Kits...

MK4024 Edutainment CD16 Kit

2x CD-ROM,SB16,42 Top Quality Educational & Entertainment Titles,Speakers & Mic (Internal)	$4

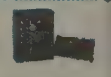
MK4029 Digital School House CD16Kit

2x CD-ROM , SB16, 20 HQ Educational Titles	$2

GAME BLASTER CD16Kit

2xCD,Game Blaster 16,Joystick,Speakers&Top Games	$37
OFFICE MULTI-MEDIA Kit	$5

Sound BLASTER



SB-0100	SB Value Edition w/11 SW Bundle	$5
SB-1600	Sound Blaster Value ProEdition	$7
SB-2770	SB16 Value Edition w/CD Interface	$
SB-1779	SB16 SCSI-2 WB&ASP Upgradable	$1
SB-1770	SB16 SCSI-2 with ASP	$1
SB-1759	SB16 MultiCD WB&ASP Upgradable	$1
SB-1750	SB16 MultiCD with ASP	$1
SB-2760	SB AWE32 w/Advanced WavEffects	$2
SB-3780	SB AWE32 Value Edition	$2

ORCHID

ADVANCED 16-BIT SOUND CARDS

SoundWave 32

SW-32Plus	16-Bit Stereo Sound with FM&Wavetab Synthesis, Mitsumi & Sony CD Interface	$1
SW-32+SCSI	16-Bit Advanced DSP Sound, Mitsum & SCSI CD Interface,Speakers & Mic	$2

GameWave 32

GW-32Plus	Multimedia Ready!Wavetable Sound Card, Sony & Mitsumi AT-Bus CD Interface	$1

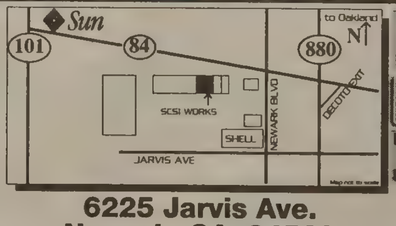
TURTLE BEACH SYSTEMS NEW!

MONTEREY	16-Bit Stereo 44.1Khz MPC Sound Card with SampleStore	$3
TROPEZ	16-Bit Stereo 48.1Khz MPC Sound Card with game compatibility	$2
MONTE CARLO	16-Bit Stereo game compatibl Sound Card	$
TAHITI	16-Bit High Quality Digital Audio Card	$2
MAUI	Wave Upgrade for all 8/16 Bit "FM" cards, with sampling	$1
RIO	WaveBlaster compatible synthesizer with sampling	$1
Daytona	Premium PCMCIA Wavetable Sound Card with sampling	$4
Audio Advantage	Low Cost PCMCIA *type II with V-Synth Wavetable Software*	$1
MIDI Karacke	Karaoke software works with a Sound Card; includes 25 Songs	$
Wave SW	Wave editing software with effects Process	$
TURTLE TOOLS	Collection of 5 programs for musi and an effects CD-ROM with over 300 sounds	$
Quad Studio	Four Track Digital Audio Recording System	$4
Monterey Upgrade Kit	Monterey, Sony double speed CD-ROM, Compel PE, music, games and more !	$8
CRESCENDO Music Upgrade Kit	Maui, Miracle software, keyborad	$4

(510) 494-8100

SCSI WORKS

COMPUTER PRODUCTS



6225 Jarvis Ave.
Newark, CA, 94560
M-F 6a-7p; Sat 9a-5p; Sun 10a-4p PST
FAX (510) 494-8501

COD'S PO'S VISA MasterCard

CORPORATE DEPARTMENT

"Dedicated To Serving Purchasing Agents Worldwide!"

Corporate, Dealer, Government, Educational, & International

(510) 494-8100

TECH SUPPORT (510) 494-8045 FAX (510) 494-8501

Electronic & Bank Contact Verification To Prevent Frau

Full Cooperation with Police for all fraud Orde

© Copyright 1995 May MicroTimes ad. All rights are reserved. Prices and availability are subject to change. Not responsible for typographical errors. No reproduction, in whole or part, of any kind, allowed without prior written consent of TEC.

WANGTEK

3.5" 1/4" Mini-Cartridge
Floppy Tape Backup Kit
Model # 700MC

$289

- 3.5"x1" Form Factor !
- Up to 10MB+ per Min Transfer Rate
- One Data Cartridge Included
- Up to 700MB w/SW data compression!
- Arcada Backup Software (DOS & WIN)

TAPE BACKUP DRIVES

EXABYTE

1.0GB Internal FS1G Tape Drive Kit

$649

- Adaptec 16-Bit SCSI Controller Card
- Backup Software (DOS,WIN or OS/2)
- Up to 34MB/Min Transfer
- One Data Cartridge
- 48 Hour Replacement WARRANTY

External Kit $749

4.0GB Internal 4200CI Tape Drive Kit

$939

- Adaptec 16-Bit SCSI Controller Card
- Backup Software (DOS,WIN or OS/2)
- Up to 28MB/Min Transfer
- One Data Cartridge
- 48 Hour Replacement WARRANTY

External Kit $1029

[illegible] SCSI-2 [illegible]

		INT/EXT
EXB-2501	1GB 567KB/sec	$489/$619
EXB-2502C	2GB 1.13MB/sec Compressed	$Call$Call
FS4000	2-4GB 1MB Cache 14MB/min	$1119/$1259
FS4000DC	2-4GB 1MB Cache 28MB/min	$1239/$1489
EXB-4200	2GB up to 28MB/min w/Comp	$779/$879
EXB-4200C	4GB up to 28MB/min w/Comp	$799/$899
8205XL	3.5-7GB up to32MB/min w/Comp	$1289/$1599
8505XLi	7-14GB up to 60MB/min w/Comp	$1999/$2299
EXB-BKT	Exabyte 5.25" Bracket for 3.5" Units	$39

HEWLETT PACKARD

The Most Reliable SCSI Tape Backup for MAC,PC or SUN!

DAT SERIES (4mm)

		INT / EXT
35470A	2.0GB 3.5" 183kb/sec DDS	$779/$879
35480A	4-8GB 3.5" up to 732kb/sec DDS	$859/$949
C1533A	4-8GB HW DataCompression DDS-2	$1019/$1119
C1553A	24-48GB 6-Cart Autoloader	$2249/$2369

CONNER

Archive VIPER 1/4" SERIES

		INT	EXT
2150S	250MB 112KB/sec	$299	$399
2525S	525MB 200KB/sec	$459	$559

Python™ DAT SERIES 3 (4mm)

4320/50	2GB up to 11MB/min - INT/EXT	$799/$989
4354XP	2GB Turbo-22MB/min 1MBCache-EXT	$1049
4326NP	4-8GB 5MB/sec 1MB Cache -INT	$928
4356XP	4-8GB w/Comp 1MB Cache -EXT	$1159
4352XP	4-8GB DAT SCSI-2 -EXTERNAL	$1199
4324T	4GB Turbo 1MB Cache INT/EXT	$829/$939

CONNER TAPE·STOR™ MINI DATA CART

TS250	250MB Runs Off Floppy Port	$148
TS420	420MB Runs Off Floppy Port	$169
TS420P	420MB Runs Off Parallel Port	$319
TS850	850MB (QIC WIDE) Floppy Port	$264
TS850P	850MB (QIC WIDE) Parallel Port	$389
TS4000	4.0GB QIC WIDE-SCSI	$529
TS4000E	4.0GB QIC WIDE-SCSI External	$619

COLORADO MEMORY SYSTEMS INC.

INTERNAL: RUNS OFF FLOPPY PORT

DJ20	250MB (JUMBO 250)	$138
DJ35	350MB (JUMBO 350)	$169
DJ25	680MB (JUMBO 700)	$255
DJ50	1.4GB (JUMBO 1400) *NEW*	$355

JUMBO Accessories.......

FC20	8-Bit Tape Accelerator	$89
TC-15	16 Bit High Perf. Accelerator	$189
KE10/15	External Case Kit for Jumbos	$119

COLORADO MEMORY SYSTEMS INC. POWERTAPE

		INT / EXT
PT10	1.0GB SCSI-2 - 1/4"	$589/$N/A
PT25	2.0GB SCSI-2 - 1/4"	$929/$1029
PT50	4.0GB SCSI-2 - 1/4"	$1119/$1239
PD60	2-4GB SCSI-2 DAT	$999/$1099

Trakker

EXTERNAL: RUNS OFF PRINTER PORT

JT20	250MB TRAKKER 250	$269
JT35	350MB TRAKKER 350	$335
JT25	680MB TRAKKER 700	$389

WangDAT

4mm DAT SCSI TAPE BACKUP

		INT / EXT
3100	2.0GB 3.5" DDS 183kb/s	$779/$879
3200	4-8GB 3.5" DDS-DC up to 366kb/s	$869/$969
3400DX	4-8GB DDS-2 22-44mb/min	$999/$1099

WANGTEK

5.25" 1/4" SCSI TAPE BACKUP

			INT / EXT
5150ES	250MB	6.75MB/min	$309/$409
5525ES	525MB	12 MB/min	$419/$519
51000HT	1.2GB	17.1 MB/min	$649/$739
9500DC	5-10GB	36-72MB/min	$1149/$1249

3.5" 1/4" FLOPPY TAPE BACKUP

3010MT	340-700MB 2.5-5MB/min Floppy	$249
3020MT	680MB-1.4GB 5-10MB Floppy	$CALL

FREE* Backup software By **NovaBack**

* Offer Valid with the Purchase of any SCSI based tape backup unit only.Limit one copy per unit. Available in QuickStart for DOS,Win or OS/2 only. While supplies Last.

SCSI BACKUP SOFTWARE

NovaBack by NovaStor

NBDOS	SINGLE USER FOR DOS	$35
NBWIN	SINGLE USER FOR WINDOWS	$69
NBOS/2	SINGLE USER FOR OS/2	$39
NBNET50	NLM-50 USER (DOS) for Networks	$295
NBNETU	NLM UNLIMITED USERS (DOS)	$395
NBNETJr	NLM JUNIOR (DOS) for Networks	$239
NBMAC	Nova MAC for Macintosh	$99

PORTABLE SOLUTIONS

backpack BY **MicroSolutions** *Computer Products*

NEW!

- Portable, Compact and Sleek.
- No cards to install, plugs into printer port.
- Perfect for Notebooks,Laptops & desktops.
- Simple Installation w/EPP & 1284 port support.

MSTP250	Backpack Tape Drive QIC80 up to 250MB	$279
MSTP700	Backpack Tape Drive QIC3010 up to 900MB	$449
MSCD2X	Backpack CD-ROM Double Speed	$309
MSCD4X	Backpack CD-ROM Quad Speed	$349
MSHD420	Backpack Hard Drive 420MB	$419
MSHD850	Backpack Hard Drive 850MB	$519
MSHD1200	Backpack Hard Drive 1.2GB	$Call

TAPES & CARTRIDGES

SyQuest Cartridges

			1Pc.	5Pk.
SQ400	44MB	5.25"	$48	$235
SQ800	88MB	5.25"	$54	$265
SQ310	105MB	3.5"	$58	$280
SQ2000	200MB	5.25"	$82	$399
SQ327	270MB	3.5"	$65	$315

4mm DAT

		Ea./5Pak
Exabyte/HP	90 Meter	$20/$90
Maxell/3M/Sony	90 Meter	$15/$65
Fuji-DG90M	90 Meter	$13/$55
Sony/HP	120 Meter(DDS-2)	$29/$139
4mm Cleaning Cartridge		$20/$95

8mm Data Carts

		Ea./5Pak
Exabyte/Sony	112 Meter up to 5GB	$19/$90
Exabyte/Sony	160 Meter XL up to 7GB	$29/$140

QIC80 Upgrade Kits-These Kits Will Turn your 250 MB Tape Drive Into a 350 MB Drive !

		Ea./5Pak
3M	350MB Kit w/2 DC2120XL Carts	$69/$330
CMS	350MB Kit w/DT-350 Tape	$49/$235

Sony	QIC-WIDE QW5122F up to420MB	$20/$95
Sony	QIC-WIDE QW3010XLF up to850MB	$26/$125
Sony	QIC-WIDE QW3080XLF up to4GB	$33/$160
3M	DC2750/MC3000 (750MB)	$28/$135
EXABYTE	DC2750/MC3000 (750MB)	$30/$145
EXABYTE	MC3000XL (1GB)	$39/$190
3M	MC3000XL (1GB)	$35/$168
3M	MC3000XL Formatted	$40/$190
Sony	QD2120 QIC80 up to250MB	$22/$105
Sony	QD2120 unformatted up to250MB	$19/$90
3M	DC2120 Ximat up 250MB	$17/$79
3M	DC2120XL Ximat up 350MB	$25/$120
Maxell	DC2120 unformatted tapes	$15/$69
Maxell	DC2120 QIC 80 formatted	$18/$85
Maxell	2120 Cleaning Kit	$22/$100
GIGATEK	DC2120 QIC80 up to250MB	$15/$69
GIGATEK	DC2120XL up to350MB	$22/$104

1/4" Data Carts

		Ea./5Pak
Sony	QD6150 - 150MB	$17/$79
Sony	QD6250 - 250 MB	$23/$104
Sony	QD6525 - 525 MB	$29/$140
3M/Maxell	DC6150 - 150MB	$16/$75
3M/Maxell	DC6250 - 250MB	$22/$99
3M/Maxell	DC6525 - 525MB	$28/$135
GIGATEK	DC6150 - 150MB	$14/$65
GIGATEK	DC6250 - 250MB	$19/$90
GIGATEK	DC6525 - 525MB	$24/$109
3M	Magnus 1.2 - 1.2 GB	$45/$215
3M	Magnus 2.0 - 2.0 GB	$59/$285
GIGATEK	DC9120 - 1.2GB	$45/$215
GIGATEK	DC9200 - 2.0GB	$59/$285
Maxell	DC-9135 - 1.3 GB	$49/$235

3.5" Optical Carts

		Ea./5Pack
3M/Ricoh	128MB 512 bytes/sec	$30/$140
Verbatim/Maxell	230MB 512 bytes/sec	$47/$219
FUJITSU	230MB 512 bytes/sec	$55/$265
KOMAG	230MB 512 bytes/sec	$33/$155
OMD-230HS	230MB Pinnacle Hi Speed Media	$39/$190

5.25" Optical Carts

Maxoptix	1.2G-512b/s or 1.3G-1024b/s-Glass	$189
Maxoptix	1.2G-512b/s or 1.3G-1024b/s-Poly	$149
HP	1.2G-512b/s or 1.3G-1024b/s	$109
OMD1200HS	Pinnacle 1.2G 512b Hi Speed (Universal)	$119
OMD1300HS	Pinnacle 1.3G 1024b Hi Speed (Mac)	$119

Blank Recordable CDs

		1/5Pk
540MB	63min Compact Disc SONY	$13.59/64
540MB	63min Compact Disc Other	$12.50/60
650MB	74min Compact Disc Kodak	$16.99/$80
650MB	74min Compact Disc Sony	$15.99/$75
650MB	74min Compact Disc Other	$13.99/$68
RCD-74	74min Compact Disc Pinnacle	$19/$90

DATA/FAX Modems

NEW! from... **AT&T**

		INT/EXT
28.8	DataPort™ Express for PC-V.34	$229/$249
28.8	DataPort™ Express for Mac-V.34	$259
28.8	PCMCIA V.34 KeepInTouch™ Express	$369

FAX/MODEMS

U.S. Robotics The Intelligent Choice in Data Communications

Sportster

14.4 & 28.8 High Speed Fax/Modems

14.4	INT/EXT for PC - V.32bis w/V.42	$119/$129
14.4	Mac & Fax-V.32 for Macintosh	$139
14.4/28.8	PCMCIA 2.1 Fax/Modem	$179/$369
28.8	INT/EXT for PC - V.34 w/V.42	$229/$239

Courier

The Only V. Everything Modem !

28.8	INT/EXT for PC V.34-V.FC-V.42	$385/$419
19.2	EXT for PC Dual Standard	$369
28.8	EXT for PC Dual Standard	$599
28.8	PCMCIA V.34 Dual Standard Data/Fax	$469

TDK.

High Quality and Performance PCMCIA Modems !

- 28.8k bps data and 14.4k bps fax
- DirectConnect Cellular with MNP10 adverse channel enhancement protocol.
- V.42/MNP2-4 error correction and V.42/MNP5 data compression.
- High-performance NS16550A compatible interface.
- High speed APT™ parallel port interface with
- Windows 3.1 driver-Up to 300Kbits throughput.
- PCMCIA 7-pin industry standard connector.
- Flash memory-based design.

28.8 V.34 Lightning fast performance $319

- 14.4k bps data and send/receive fax.
- V.42/MNP2-4 error correction and V.42/MNP5 data compression.
- High-performance NS16550A compatible UART with 115.2k bps DTE speed for reliable performance in windows.
- PCMCIA 7-pin industry standard connector.
- Flash memory-based design.

14.4 PCMCIA HIGH Performance $148

Supra High Speed Modems

		Int/Ext
14.4	Express PLUS for PC	$85/$99
14.4	Standard For PC	$114/$129
14.4	Express PLUS External for Mac	$105
14.4LC	External for Mac w/SW & Cable	$135
28.8	For PC (V.Fast)	$179
28.8	For PC (V.34)	$214/$225
28.8	Ext for Mac V.34 w/SW & Cable	$249

E•TECH

28.8 Bullet 100E-LCD Modem

- **LCD Display**-Displays signal quality status, modem settings and data rate.
- **Flash ROM**-Software upgradable design for new features and CCITT V.34 standard.
- **Fast Processing Speed**-16 Bit CPU used.
- **SmartKey Front Panel**-Easy setup for changing settings.
- **Features**-Up to 115,200bps effective throughput.
  - -V.34/V.32ter/V.32bis/V.32/V.22bis/V.22/V.23/V.21 & Bell 212A/103 compatible.
  - -V.42bis/V.42 and MNP2-5 compression ensures data intgrity.
  - -Exended AT command set.

28.8	Bullet 100E Ext LCD Display	$299

High Speed DATA/FAX Modems

14.4	Bullet PC1414UX Internal	$89
19.2	Bullet PC192MX Internal	$Call
28.8	Bullet PC288MX Internal V.34	$149
28.8	Bullet 1428VQE External V.34	$175

ZOLTRIX

14.4	Internal/External	$59/$85
14.4	PCMCIA	$129
28.8	Internal/External V.Fast	$104/$135
28.8	Internal/External (V.34)	$139/$179

EXTERNAL MODEM SERIAL CABLES

DB9F to DB25M	6/10/15ft	$3.5/5/8
DB25F to DB25M	3/6/10/15/25ft	$4/5/7/8/10

HIGH SPEED SERIAL CARDS

QUICKPATH 16550 Enhanced Serial Boards w/Super IO !

PORT-FOLIO 550E: 13-Port Super I/O 4HS16550UARTs 2HD/4FD/2Bi-Parallel,1Game, Extd IRQ's $129

FlexPort42-6 Port 4 16550 Ser , 2 Bi-Directional parallel, Supports Extended IRQ's $109

IO50	16550HighSpeedI/O Card 2S/1P/1G	$29
IO45	Standard I/O Card 2S/1P/1G	$12

AVEC

2400dpi Flatbed Color Scanner

$449

- 16.8 million Colors & 256 Grayscale levels,
- 24-Bit Color
- Caere's Omni-Scan SE, Art-scan for PC OR
- Adobe Photoshop 2.5LE, & Art Scan for MAC
- Complete plug & play package.

MONITORS

NEC SEE, HEAR AND FEEL THE DIFFERENCE.™

XV-15	15"	1280x1024 .28dpi PC & MAC	$455
XE15	15"	1024x768 .28dpi flat screen	$559
XP15	15"	1024x768 .28dpi Opticlear	$675
XE17	17"	1024x768 .28dpi flat screen	$999
XP17	17"	1280x1024 .28dpi Opticlear	$1269
XV17	17"	1280x1024 .28dpi up to100Hz	$888
XE21	21"	1280x1024 .28dpi flat screen	$1999
XP21	21"	1600x1280 .28dpi Opticlear	$2499

NOKIA MONITORS NOKIA ON TOP

NEW! 447L Color Monitors-Blk/Blue/Red/Grn/Gray with Two Stereo Powered Speakers Built In !

447L	17" 1024x768 .28 80Hz Refresh	$689
449E	15" 1024x768 .28 80Hz Refresh	$439
449E	15" 1024x768 .28 80Hz with TCO	$619
447X	17" 1600x1200 .25 110Hz Refresh	$979
447X	17" 1600x1200 with TCO	$1149
445X	21" 1600x1200 120Hz Refresh	$2259
445X	21" 1600x1200 120Hz Refresh TCO	$2599

MAG INNOVISION

High Resolution Monitors with Advanced Microprocessor based Digital Controls

DX15F	15" 1280x1024 .28 up to 100Hz	$359
DX17F	17" 1280x1024 .26 up to 100Hz	$659
MXP17F	17" 1600x1280 .26 up to 120Hz Flat screen	$899
MX21F	21" 1600x1280 .28 up to 120Hz Flat screen	$1699

NANAO®

Ultra High Resolution Intelligent Color Monitors

F2-15	15"	1280x1024	.28	up to 120Hz	$549
F2-17	17"	1280x1024	.28	up to 120Hz	$919
T2-17	17"	1600x1200	.25	Trinitron tube	$1349
F2-17EX	17"	1600x1200	.26	up to 160Hz	$999
T2-17TS	17"	1600x1200	.25	up to 160Hz	$1079
T2-20	20"	1280x1024	.31	Trinitron tube	$1969
F760i•W	21"	1280x1024	.28	74Hz	$1969

SAMSUNG Electronics

High Performance SyncMaster™ SyncMonitors

CVP4237	Sync-3Ne	14" .28 1024x768	$245
CSQ4387L	Sync-14GL	14" .28	$299
CSR5987L	Sync-15GL	15" .28	$369
CST7687L	Sync-17GL	17" .28 1280x1024	$675
CSF7689L	Sync-17GLS	17" .28 100mhz	$835

ViewSonic®

See The Difference !™

VS-6E	14"	.28 1024x768	$295
VS-15	15"	.27 1280x1024 Dig Ctrl	$429
VS-15ES	15"	.28 1024x768	$349
VS-15G	15"	.28 1280x1024 Dig Ctrl	$399
VS-17	17"	.27 1600x1280 w/OVC	$875
VS-17E	17"	.28 1280x1024 Dig Ctrl	$709
VS-17G	17"	.28 1280x1024 Dig Ctrl w/OVC	$749
VS-20PS	20"	.28 1600x1280 dual page display	$1499
VS-20G	20"	.28 1600x1280,Dig Ctrl	$1349
VS-21PS	21"	.25 1600x1280 w/OVC	$1799

HITACHI

SuperScan SVGA Non-Interlaced Monitors

SSPro15	Pro15-15" 1280x1024 .28 Dig Ctrls	$399
NS1764	Super17s-17" 1280x1024 .26 Dig Ctrls	$739
CM1797	Elite17-17" 1600x1200 .26 Dig Ctrls	$959
CM2096	SuperScan20s- 1280x1024 .31 20"	$1269
CM2098	Elite20-20" 1600x1200 .28 Dig Ctrls	$1589
CM2198-513	Elite21-21" 1600x1200 .28 30-94KHz	$1999
CM2198-514	Elite21-21" 1600x1200 .28 30-85KHz	$1799
CM2199-512	Supreme21-21" 1600x1200 .26 Dig Ctrls	$2239

SONY

CPD-1425	14" SVGA ,.25dpi 1024x768@60Hz	$345
GPD-15sf	15" SVGA , .25dpi	$439
GDM-17SE1	17" SVGA , .25dpi	$999
GDM-17sf	17" 1280x1024 @60Hz .25 dpi	$879
GDM-20SE	20" 1600x1200 @60Hz .30 dpi	$1899

SPECIAL MONITOR CABLES

VGA EXTENSION CABLE 6ft	$5
15 PIN to 5 BNC MONITOR CABLE	$29

AVEC Flatbed Color Scanners

A24PO	2400	3Pass	600x300 PC	$449
A24MD	2400	3Pass	600x300 MAC	$449
R241PTE	2412	1Pass	1200x300 PC	$699
R241PF	2412	1Pass	1200x300 PC	$549
R241MTE	2412	1Pass	1200x300 MAC	$609
R481PTE	4816	1Pass	1600x400 PC	$899
R481MTE	4816	1Pass	1600x400 MAC	$909
R962PTE	9624	1Pass	2400x600	$1795

VIDEO CARDS

NUMBER NINE VISUAL TECHNOLOGY

NEW!

The Most Powerful Graphics Accelerator Based on the First 128-bit Graphics Engine!

- 128-bit IMAGINE 128 Graphics Accelerator

#9-Imagine1600	PCI 4MB VRAM	$1049
#9-Imagine128	PCI 4MB VRAM	$819

- Number Nine FX Series

#9-FX Vision330	PCI 1MB/2MB	$148/$199
#9-FX Motion771	PCI 2MB/4MB	$299/$449

64-bit Breakthrough Graphics Accelerator

- 9GXE *Ultra High Performance* S3 86C964 & Vision864 Chip

9GXE64	PCI or VLB 1MB/2MB(DRAM)	$175/$249

Professional 64-bit Graphics Accelerator

9GXE64Pro	PCI or VLB 2MB/4MB(VRAM)	$339/$509

#9GXE64Pro1600 Powerhouse

9GXEPro1600	PCI or VLB 2MB/4MB(VRAM)	$529/$679

DIAMOND MULTIMEDIA Viper SE

Stealth 64 Series (64 Bit)

DRAM	VLB or PCI 1MB/2MB	$139/$189
VRAM	VLB or PCI 2MB/4MB	$289/$429

Viper Series

ViperPro	NEW 4MB Scalable Video Playback	$Call

Video Series

Video	NEW VLB or PCI 2MB/4MB	$329/$475

SpeedStar Series

SS-Pro	1MB DRAM VLB/ISA	$109/$99
SS-64	PCI or ISA 1MB/2MB DRAM	$149/$199
SS-SE	PCI or VLB 1MB/2MB DRAM	$99/$154

ATI TECHNOLOGIES INC.

NEW!

Graphics Pro Turbo 1600
(1600x1200) up to100Hz PCI 4MB (VRAM) .... $Call

Graphics Pro Turbo (1280x1024) up to100Hz
VLB, PCI or ISA 2MB/4MB (VRAM) .... $339/$529

WINTurbo 64-bit (1280x1024) up to100Hz
VLB or PCI 2MB(VRAM) $269

Graphics Xpression (1280x1024) up to75Hz
VLB, PCI or ISA 1MB/2MB(DRAM) .... $165/$219

matrox *MGA - Graphics Accelerator*

IMP/LTE	IMPLite 2MB VRAM 1280x1024 PCI/VLB	$319
VLB/2	Ultima 2MB 64Bit VLB	$379
IMP+	IMP+ 2MB VRAM 64Bit PCI/ISA	$385
IMP+A/220	220MHz DAC for 85Hz @1600x1200 ISA	$535
IMP+P/220	220MHz DAC for 85Hz @1600x1200 PCI	$489
MOD/2MB	VRAM Upgrade Module(IMP+)	$249

SCSI ACCESSORIES

EXTERNAL SUBSYSTEM CABLES

Centronics 50 to 50 Pin SCSI-2	$29
Centronics 50 to DB 25-Pin 3ft/6ft	$7/$12
Centronics 50 to Centronics 50 3ft/6ft	$7/$13
Centronics 50 to DB-50 3ft/6ft	$32/$42
Centronics 50 to 68 Pin FastWide 3ft/6ft	$69/$79
DB-50 to 50 Pin SCSI-2 3ft	$45
DB-50 to DB-50 3ft	$39.99
50 Pin SCSI-2 to SCSI-2 3ft/6ft	$33/$45
68 Pin Wide to Wide 3ft/6ft	$69/$79

INTERNAL RIBBON CABLES

50-Pin SCSI 2/3/4 device	$5/$9/$12
50-Pin SCSI 5/6/7 device	$14/$18/$22
68-Pin SCSI Fast Wide 3 Connector 2 device	$65
68-Pin SCSI Fast Wide 5 Connector 4 device	$99

Other Accessories ....

Centronics 50 Terminator Single/Dual End	$9/$13
Centronics 50 Terminator ACTIVE w/LED	$19
50-Pin SCSI-2 Terminator Passive/Active	$49/$79
Wide 68 Pin Terminator	$59
SCSI-2 to SCSI-1 Gender Changer	$39

External SCSI SubSystem Cases

CASES

- High Quality Shielded FCC,UL Approved
- Universal Auto Voltage Switching 110/240V
- Terminator,SCSI ID Switch & Cent.50 cable included
- Designed to fit HD's, CD's, Removable, Optical.

Half Ht for 3.5" IDE Drives for parallel Port	$109
Half Ht for 5.25" HH or 3.5" Devices(1 Bay)	$89
Half Ht for CD-ROMS's w/AudioJacks	$99
JMR Chico Case for 3.5"HH Device	$119
JMR WIDE Chico 3.5" Drive Case w/Term&Cable	$259
JMR Nano Case for 3.5"x1" Device	$109
5.25" Full Ht for (1)FH or (2) HH Devices(2Bay)	$149
5.25" Double Full Ht for (2) FH Devices(4Bay)	$219
5.25" 3-Full Ht&1HH or 7HH Devices(7Bay)	$349
Removable Rack Frame for 3.5" HD SCSI or IDE	[illegible]

(510) 494-8100

SCSI WORKS

COMPUTER PRODUCTS

PURCHASE ORDERS WELCOME

"Dedicated to serving Purchasing Agents Worldwide"

Gov't University, & Approved Corporate P.O.s Welcome

CORPORATE DEPT. (510) 494-8100

FAX # (510) 494-8501

- NO SURCHARGE FOR CREDIT CARDS
- 14 Day Money Back Guarantee.
- Dealers Qty Pricing is Available.
- Returns accepted with RMA#, and in original Packing and Condition.
- Returned Items for refund are subject to 15% restocking fees.
- Free delivery within 50 mile radius to corporate customers.
- Memory Simms, CPUs, and Items that include Software are not refundable.
- Price & Availability are subject to change.
- Not responsible for typos or Technical errors.
- We reserve the right to refuse service to anyone.
- All logos are the property of their respective companies.
- Certain items may require special ordering.

CORPORATESCSI®

- *Pre-approved purchase orders for Fortune 1000 companies and government agencies.*
- *Qty and dealer discounts are available.*
- *All educational institutions are welcome.*
- *International orders are welcome.*

(510) 494-8100

Fax in your PO's to: (510) 494-8501

Small Office, Home Office

continued from page 72

•*Translation Problems Arise at the Worst Possible Time.* This is more than Murphy's Law. It comes from a number of complex factors in post-modern life: just-in-time inventories, downsizing, rising demand for productivity, and quality with diminishing resources. They all boil down to one exhilarating or debilitating fact: There is no time for anything extra. We fill our lives to the very edges with busy-ness, so every problem is a crisis.

In practice, I always ask recipients of any work I've done to open it up immediately and make sure it has survived the transfer. If I do not ask them to do this, they will probably not look at the file until they actually need it. At that point, any problem will be a big problem. If there has been a mistranslation , I want as much time as possible to work on it.

•*What Is Standard Translates More Easily Than What Is Idiosyncratic.* Every database has a translator for dBASE IV. Word processors can still translate Wordstar 3. These packages became standards. There are problems with translations into and out of these formats, but most of the issues have been met and solved long ago.

•*Simple Translates More Easily Than Complex.* Even more reliable are the plain-vanilla formats. I transfer most of my articles as .txt files, because I have discovered that anything more complex is likely to get garbled by somebody's translator. What is lost in formatting is made up for in reliability.

•*Integrated Solutions Mean (Sometimes) No Translating at All.* This is why people like truly integrated packages. Claris Works (reviewed here last month) embeds applications within each other—you don't need to translate spreadsheet cells for the word processor, you just put a tiny spreadsheet into the text.

If an office standardizes on a single integrated package, there may be almost no internal translation problems. You still have to face conversion issues with clients and sources.

•*Blessed Are the Hermeneuts.* Some people spend their lives dealing with translations. They are "hermeneuts," named after the same Greek God Hermes. Unlike other kinds of Newts, they bring great kindness.

The anonymous technician on the support line at The WELL saved me when I was trying to upload the refractory column. If you are not yourself a hermeneut, cultivate those who are. Praise them in public; buy them pizza. They deserve it, and you need them.

God Of Thieves, God Of Merchants

Translation problems can steal your time and your money. They can also *make* money for you. Instead of praising and feeding hermeneuts, you can become one.

If trouble-shooting appeals to you, there are people who will pay you to handle data-translations for them. There are even more who will pay you to be a consultant when their own attempts go awry.

Three rules for a hermeneut-to-be are

Novell Authorized Education Center™

We know your NOVELL training is important to you.

And we are listening...

YOU ASKED FOR

☐ The very best instructors
☐ Quality customer service
☐ CNE, ECNE, and CNA programs
☐ Daytime, evening and weekend classes
☐ State-of-the-art equipment and facilities

AND TEKNOWLOGY HEARD YOU

☑ TeKnowlogy instructors are highly rated Certified Novell Instructors with ***extensive field experience.***
☑ TeKnowlogy provides ***each student*** with their own Education Consultant to guide and support them in achieving their individual training needs.
☑ TeKnowlogy ***offers all*** Certified Novell Engineer, Enterprise Certified Novell Engineer, and Certified Novell Administrator programs.
☑ TeKnowlogy was ***the first NAEC*** in the Bay Area to offer the CNEvening. Now offering ***Weekend CNE*** programs!
☑ TeKnowlogy offers the highest quality training facilities including ***one PC per student, separate classrooms and labs.***
☑ TeKnowlogy ***now offers*** financing for your CNE, ECNE, and CNA training.

Interested in Netware Programming?
TeKnowlogy now offers the
Novell Developer Education courses... call for details.

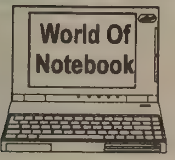
CLARITY
TEKNOWLOGY
EDUCATION CENTERS
1-800-729-9995

FREE
CNE Orientations
May 10
in San Jose
May 17
in San Francisco
May 23
in Walnut Creek
Space is limited!
1-800-729-9995

PC WAREHOUSE

90 Locations Nationwide

You will come for the price
You will stay for the service



IBM

ThinkPad 360

SL Enhanced i486SX/33,486DX2/50
Active , Dual Scan Color , Monochrome

ThinkPad360-170/340........................$Call
ThinkPad360CS-170/340.................$Call
ThinkPad360C-170/340...................$Call
ThinkPad360CE-170/340..................$Call
ThinkPad360CSE-340/540..............$Call

ThinkPad 755

SL Enhanced i486DX2-50 or DX4/75 or DX4/100
Active or Dual Scan Color

ThinkPad755CS/50-340/540............$Call
ThinkPad755C/50-340/540..............$Call
ThinkPad755CS/75-340/540,...........$Call
ThinkPad755C/75-340/540.....$3699$Call
ThinkPad755CSE/100-170/340/540.$Call
ThinkPad755CE/100-340...............$5399
ThinkPad755CE/100-170/540.........$Call
ThinkPad755CD/100-540..............$6999

NEC

Versa P Series

Pentium 75 MHZ CPU

Versa P/75C-810..................................$4999
((Pentium , 8MB RAM, 810 MB HDD,Active Color)

Versa V Series

SL-Enhanced i486DX2/50 or DX4/75 CPU

Versa V/50D-250(Dual Scan Color).........$Call
Versa V/50C-250(Active Color)...............$Call
Versa V/50C-340(Active Color)...............$Call
Versa V/75C-540(Active Color)............$3729

Versa M Series

SL-Enhanced i486DX4/75 or 100 CPU

Versa M /75-340, 8MB Ram,TFT......$Call
Versa M /100-340, 8MB Ram,TFT....$Call

SHARP

8660T-320..$Call
(i486DX2/50, 9.4" Active. color, Trackball)
8700T-250..$Call
(i486DX2/50, 8.4" Active Color, Track Ball)
8900-320..$Call
i486DX4/75,10.4" Active Color,8MB Ram)

AST

810N-66Mhz 4/510MB Dual Scan....$Call
900N-75Mhz 8/340MB Dual Scan....$Call

TOSHIBA

T1960CT-200/320-DX2/50-4MB.....$Call
T2100-DX2/50-4MB Mono.............$1459
T2100/CS/CT-DX2/50-4/8MB.........$Call
T2150CDS-500-DX4/75-4MB.........$Call
T2150CDT-500-DX4/75-8MB........$4689
T2400CS-250-DX2/50-4MB...........$Call
T2400CT-250/320-DX2/50-8MB.....$Call
T2450CT-320-DX4/75-8MB...........$Call
T4800CT-500-DX4/75-8MB..........$3539
T4850CT-520-DX4/75-8MB...........$Call
T4900CT-770(Pentium)..................$5395
T6600C-510/510CD/510CDV..........$Call

TEXAS INSTRUMENTS

TravelMate4000M..........................$3799
486DX4/100, 4MB, 524MB, Active Color,1PCMCIA III, SCSI II, build-in 16-bit sound, internal speakers
CD ROM docking station................$Call

NOTEBOOK MEMORY

IBM

ThinkPad350/360-4MB...................$209
ThinkPad350/360-8MB...................$399
ThinkPad350/360-16MB.................$699
ThinkPad750/755-4MB...................$209
ThinkPad750/755-8MB...................$399
ThinkPad750/755-16MB.................$699
ThinkPad755-32MB.......................$Call

TOSHIBA

T2400/2450/3400/3600
4/8/16MB 3.3v.................$209/399/729
T4400/6400/6600/1900/1910/1950
T1960/4500/4600/4700/4800/4850
4/8/16MB 3.3v.................$209/399/729

SHARP

8150/8650/8650II-4MB..................$209
8150/8650/8650II-16MB................$699

NEC

Versa E/V/M 4 M 3.3v...................$209
Veras E/V/M 8 M 3.3v....................$399
Versa E/V/M 16MB 3.3v.................$699
Veras S 4/8MB..............................$Call

NOTEBOOK ACCESSORIES

Motorola 14400F/M Cellular..........$269
Intel 14400 Fax/Modem.................$189
Megahertz14400 Fax/Modem-XJ...$189
Megahertz 14400F/M Cellular.......$Call
Hayes PCMCIA 14400 F/M..........$199
Xircom PCMCIA Ethernet 10BT...$189
3COM PCMCIA Ethernet 10BT....$199
Maxtor 130 MB PCMCIA IIIHDD....$Call
Ministor 260MB PCMCIA IIIHDD...$Call
New Media PCMCIA SCSI Adap.$Call
CITIZEN Notebook Printer II.........$309
Color Kit for Citizen Printer II.........$10

Intel 486DX-33	486DX2-50/66	Intel 486DX4-100	Pentium-60	Pentium-66/75	Pentium-90/100
Intel 486dx-33 CPU	Intel 486dx2-50/66 CPU	Intel 486dx4-100 CPU	Intel Pentium 60 CPU	Intel Pentium 66/75 CPU	Intel Pentium 90/100 CPU
256K Cache, 3VLB	256K Cache, 3VLB	256K Cache, 3VLB	256K Cache, 4PCI/4ISA	256K Cache, 4PCI/4ISA	256K Cache, 4PCI/4ISA
0-128 MB RAM	0-128 MB RAM	0-128 MB RAM	0-128MB RAM,2S/1P/1G	0-128MB RAM,2S/1P/1G	0-128MB RAM,2S/1P/1G
VLB IDE Ctl w/2S/1P/1G	VLB IDE Ctl w2S\1P\1G	VLB IDE Ctl w/2S/1P/1G	Enhanced IDE-PCI	Enhanced IDE-PCI	Enhanced IDE-PCI
TEAC 1.44 Floppy Drive	TEAC1.44Floppy Drive	TEAC1.44 Floppy Drive	TEAC1.44 Floppy drive	TEAC1.44 Floppy drive	TEAC1.44 Floppy drive
Mini-Tower Case w/250w	Mini-Tower Case w/250w	Mini-Tower Case w/250w	Mid-tower case w/250w	Mid-tower case w/250w	Mid-tower case w/250w
101 Enhenced Keyboard	101 Enhenced Keyboard	101 Enhenced Keyboard	101 Enhenced Keyboard	101 Enhenced Keyboard	101 Enhenced Keyboard
$329	$349/379	$469	$559	$619/669	$839/1039

1Year Parts,2 years Labor Warranty

High Quality, Full Compatibility And Reliability Are Guaranteed!

MONITORS

9" Paper White VGA Mono...................$129
NEC XV15/XP15.............................$439/$659
NEC XE17/XP17..........................$979/$1239
NEC XE21/XP21........................$1995/$2429
SONY 15SF/17SF..........................$429/$879
SONY 17SE/20SE.......................$989/$1839
ACER 34T/56R.............................$239/$349

PRINTERS & SCANNERS

HP DeskJet540/560C.......................$279$479
HP DeskJet1200C/PS......................$999/1599
HP LaserJet4L/4ML..........................$499/969
HP LaserJet4P/4MP........................$929/1329
H LaserJet4+/4M+.........................$1389/1899
HP 4V/4MV(16PPM, 11X17)........$1889/2739
HP LaserJet4si/4siMX..................$2875/3999
HP LaserJet 5P...................................$Call
HP Color LaserJet...............................$5599
HP Envelope Feeder LaserJet3D/4...........$Call
Epson 9 Pin Dot Matrix AP2250................$89
HP ScanJetIIIP/IIIC.......................$489/899
Brother Laser Printer............................$Call

DRIVES

Conner 425MB 12ms IDE.........................$169
Conner 540MB 12ms IDE.........................$185
Conner 1.08GB 9ms SCSI.........................$485
WD-31200 1.0GB 10ms IDE......................$359
WD-2700 730MB 10ms IDE.......................$249
Maxotr 540MB 12ms IDE..........................$189
Quantum 170MB 12ms IDE.......................$139
Quantum 540MB 11ms SCSI.....................$229
Quantum 540MB 12ms IDE.......................$189
Quantum 730MB 11ms IDE.......................$239
Quantum 1.0GB 10ms SCSI......................$559
Quantum 2.1GB 10ms SCSI......................$899
Syquest 270 Int/Ext..........................$489/539

MULTIMEDIA

NEC 4xi/4xe....................................$319/479
SONY 55E int IDE.................................$115
TOSHIBA 3601B Int...............................$295
Mitsumi Quad Speed Int IDE..................$189
SoundBlaster16/MCD/ASP.........$79/$95/$139
SoundBlaster16SCSI-2.............................$119
SoundBlaster AWE32...............................$239

VIDEO CARDS

Spider 64 4MB VLB/PCI..........................$280
ATI GraphicsUltraTurbo64 2MBVLB/PCI$279
Diamond Stealth64 2MBVLB/PCI............$299
9GXE64 2VLB/PCI.................................$249
Kelvin 64 1MB VLB/PCI.........................$139
S3 SVGA 1MB VLB.................................$75
Trident ISA/VLB/PCI 1MB...........$65/$75$79

CONTROLLERS

Buslogic PCI-SCSI w/kit..........................$269
Buslogic VLB-SCSI w/kit.........................$199
Adaptec 2842 SCSI VLB w. kit...............$239
Adaptec 2940 SCSI PCI w. kit.................$209
Adaptec 2940W wide SCSI w.kit..............$299
Promise DC-4030 IDE VLBw/4HD...........$105
IDE-PCI w/2S/1P/1G.............................$35

TAPE BACKUP

Colorado DJ-20/35C 250MB...........$139/$179
Colorado Trakker 250/350MB...........$285$315
Colorado PT10 1GB.................................$599
Conner 4320 Interal 2GB...........................$749

MODEMS

Zoltrix 14400 Fax/Modem Int....................$59
Monterey1400Fax/Modem Ext..................$89
US Robotics 14400 Fax/Modem Int............$99
US Robotics 14400 Fax/Modem Ext.........$119
Zoom 28800 Fax/Modem Int....................$139

MEMORY

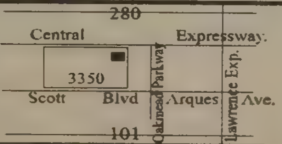
1MB X 9-70ns(3 chips).............................$Call
4MB X 9-70ns(3 chips).............................$Call
256k X -70ns(3chips)...............................$Call
1MB X 36-70ns...$Call
2MB X 36-70ns...$Call
4MB X 36-70ns...$Call
8MB X 36-70ns...$Call

MOUSE &KEYBOARDS

Logitech MouseMan....................................$45
Logitech Trackman Portable........................$39
Microsoft Mouse serial...............................$20
Qtronix 2-button serial $9
Microsoft Natural Keyboard........................$89
Monterey 81 Key Mini keyboard.................$45

Santa Clara

3350 Scott Blvd.#46
408-986-8288



Business Hours
Mon-Fri
9AM-6PM
Financing Available

MasterCard
VISA
PURCHASING ORDER

Prices & Specs are subject to change w/o notice
Advertised prices are based on 2% cash discount
Not responsible for typographical errors
04/17/95

Palo Alto

454 A California Ave
(Btw El Camino & Alma)
415-321-9288

INCREASE YOUR CASH FLOW BY ACCEPTING CREDIT CARDS

MAKE IT CONVENIENT AND DESIRABLE FOR YOUR CUSTOMERS TO BUY FROM YOU...

-Use fast state-of-the-art equipment-

ACCEPT
- VISA, MC
- ATM DEBIT CARDS
- RISK FREE CHECK
- PAY LOW RATES!

Home Businesses Welcome to Apply

High Approval Rate!

ALL TYPES OF NEW BUSINESSES CONSIDERED!

CALL DAN ANDERSON
1-800-327-2094

BBS: (415) 327-2098

CARDSERVICE INTERNATIONAL
A REGISTERED AGENT OF: TEHAMA COUNTY BANK, RED BLUFF, CA
HUMBOLDT BANK, EUREKA, CA; REDDING BANK OF COMMERCE, REDDING, CA
BANK OF OAKLAND, OAKLAND, CA; BANK OF BEVERLY HILLS, CALABASAS, CA

Guaranteed to find MicroTimes!

PENINSULA
TO OUR READERS:

Now, get your complete guide to information and resources all month long. We're stocking up, so come and get 'em!

Find *MicroTimes* magazine **always** at the following locations:

Beta Nineties Computer
133 Southwood, SSF
(West of El Camino, between W. Orange & Pondarosa)

Envisions Solutions Technology
826 Mahler Road, Burlingame
(Off Old Bayshore Hwy. near the Hyatt)

Friendly Software Store
376 El Camino, San Carlos
(Between Holly & Harbor)

Now Electronics
2031 Pioneer Ct., San Mateo
(Off 20th, west of El Camino)

Upcoming cover dates:

May 1
May 29
June 26
July 24
August 21

•*Never Forget a Translation Trick.* The problem which is driving your client mad is old news to somebody. If you have encountered it before, you can look very good by remembering the solution.

•*Always Know a Trickier Translator.* If you do not know a solution, you need to know whom you can call. Your client doesn't have to know that you telephoned a friend to get your answer.

•*Know Where to Find Good Books Fast.* The most essential of resources for any translator are a good bookstore and a good technical library. These are where you go to get file-structure information.

I often use Stacey's Books in San Francisco. It is one of the best technical bookstores in the Bay Area. They also offer book help through America Online. Debbie, who was presiding in the computer department the day I came in, is currently recommending James Murray and William vanRyper's *Encyclopedia of Graphics Formats* and Tom Swan, *Inside Windows File Formats.* She found these books in the voluminous collection of computer books the store has on hand.

(Nominations for the best technical library are open. Drop me some email.)

The fundamental thing that many of us sell is information. Quick access to it is essential. If we have it, we can resell it. By becoming a skilled translator, you can turn file-translation into hard merchant gold. ■

Copyright © 1995 by Birrell Walsh. All rights reserved.

RESOURCES:

Stacey's Books
581 Market St.
San Francisco (415)421-4687
Staceysbk@aol.com

***Encyclopedia of Graphics Formats,* $59.95**
James Murray and William vanRyper
O'Reilly and Associates

***Inside Windows File Formats,* $29.95**
Tom Swan
SAMS

***Hermes the Thief: The Evolution of a Myth,* $10.95**
Norman O. Brown
Lindisfarne

Rainbow Computers

We Guarantee The Best Price In Town!
Please Call For Price Update

SYSTEM	M/B + CPU	BASIC SYSTEM	BASIC SYS 210MB HD MGP CARD & 14" MONO MONITOR	BASIC SYS 210MB HD SVGA CARD & 14" SVGA MONITOR	BASIC SYS 4 MB RAM 210MB HD 1.2 & 1.44 DR SVGA CARD & 14" SVGA MONITOR	MULTIMEDIA SYSTEMS DOUBLE SPEED CD ROM 16 BIT SOUND CARD SPEAKERS & CD TITLES	W/BASIC SYSTEM 4MB RAM, 210MB HDD 1.2 & 1.44 DRIVE SVGA CARD & 14" SVGA MONITOR
PENTIUM 100 256K VLB PCI	$899	N/A	N/A	N/A	$1495	$1730	
PENTIUM 90 256K VLB PCI	730	N/A	N/A	N/A	1330	1565	
PENTIUM 75 256K VLB PCI	507	N/A	N/A	N/A	1107	1342	
PENTIUM 66 256K VLB PCI	457	N/A	N/A	N/A	1057	1292	
PENTIUM 60 256K VLB PCI	437	N/A	N/A	N/A	1037	1272	
INTEL 486DX4-100 128K VLB	310	435	646	770	910	1145	
INTEL 486DX2-66 128K VLB	220	345	556	679	820	1055	
INTEL 486DX2-50 128K VLB	210	335	546	670	810	1045	
INTEL 486DX-33 128K VLB	205	330	540	665	805	1040	
INTEL 486SX-33 128K VLB	180	305	516	640	780	1015	
AMD 486DX4-100 128K VLB	260	385	596	720	860	1095	
AMD 486DX2-80 128K VLB	220	345	556	680	820	1055	
AMD 486DX2-66 128K VLB	210	335	546	670	810	1045	
AMD 486DX2-50 128K VLB	200	325	536	660	800	1035	
AMD 486DX-40 128K VLB	200	325	536	660	800	1035	
IBM 486BL-75 256K VLBw/MC	210	335	546	670	810	1045	
CYRIX 486DX2-66 128K VLB	180	305	516	640	780	1015	
CYRIX 486DX2-50 128K VLB	170	295	506	630	770	1005	
CYRIX 486DX-40 128K VLB	175	300	510	635	775	1010	
CYRIX 486DX-33 128K VLB	170	295	506	630	770	1005	
486SX-33 ISA	110	235	446	570	725	960	
386DX-40 128K	89	220	430	555	710	945	

UPGRADES:	Please Add
486 ASUS PCI w/256 MB	$90
486 Genoa VLB 256K Motherboard	40
270 MB H.D.	10
420 MB H.D.	40
540 MB H.D.	60
850 MB H.D.	115
14" .28 Non-Interlace Monitor	35
15" .28 Non-Interlace Monitor	120
VLB IDE/IO	10
Promise VLB IDE/IO w/512K	95
Orchid Kelvin VLB 1MB	89
SVGA Card VLB 1 MB	35
Spider VLB 1 MB	55
Diamond SpeedStar VLB	65
Diamond Stealth 64 VLB/PCI 1/2MB	95/145

BASIC SYSTEMS CONFIGURATION:

Motherboard & CPU,
1 MB RAM, IDE I/O of
2HD/2FD/2S/1P/1G Ports,
1.44 Floppy Drive,
Mini-Tower Case w/P.S.,
101 Keyboard

MULTIMEDIA

CREATIVE DISCOVERY CD-16 KIT

- Sound Blaster Pro 16
- Speakers
- CD-ROM (Double Speed)
- CD Titles

$235

CD-ROM SOUND CARDS

• Sony 55E	$109
• NEC 4X SCSI CD-ROM	285
• Toshiba 3501 4X SCSI CD-ROM	285
• Teac 4X AT CD-ROM	175
• Mitsumi 4X AT CD-ROM	175
• Sound Blaster 16	69
• Sound Blaster 16 SCSI II	109
• Creative Labs School House w/Kit	259

HARD DISK DRIVES

210 MB	$135
270 MB	145
420 MB	165
540 MB	185
1.2 GB	355
1.0 GB SCSI	490
2.0 GB SCSI	920

FLOPPY DRIVES

Teac 1.2 MB	$43
Teac 1.44 MB	33
Teac Dual Floppy Drive	85

DISK CONTROLLERS & I/O CARDS

IDE I/O Card w/ Cable	$13
IDE I/O VLB Card w/Cable	18
Promise 2300 Plus Enhanced IDE	55
Promise DC 420 VLB w/512K	99
Promise 4030 VL-II VLB (Exp to 16 MB)	110
Future Domain SCSI	70
Adaptec 1542 C SCSI	165
Adaptec 2842 VESA SCSI	220
Adaptec 2742 EISA SCSI	275
Adaptec 2940 PCI SCSI	210

MONITORS

14" Mono Amber	$75
14" VGA Amber	90
SVGA (1024x768) .39	175
SVGA (1024x768) .28	195
SVGA (1024x768) .28 NI	210
15" SVGA	290
ViewSonic-15 E15"	355
ViewSonic-15 15"	410
ViewSonic-17G 17"	745
Impression 7 17"	575
Sony 15SF 15"	430

VIDEO CARDS

Mono Graphics	$15
Trident SVGA, 512K RAM	36
Trident SVGA, 1 MB RAM	55
Cirrus Logic 1 MB RAM, VLB	65
#9 GXE 64 PCI/VLB 1/2 MB	185/235
Orchid Kelvin 1/2MB PCI/VLB	127/177
Diamond Stealth 64 PCI/VLB 1/2 MB DRAM	129/179
Diamond Viper PCI/VLB 2 MB	255/270
Diamond Stealth 64 PCI/VLB 2/4 MB VRAM	285/430

MODEMS

Fax Modem (14400 Fax, 14400 Modem) Int	$49
Fax Modem (14400 Fax, 14400 Modem) Ext	85
Fax Modem (28800 Fax, 14400 Modem) Int	89

MISCELLANEOUS

Keyboard 101, Mitsumi/Keytronic	$15/26
Mouse 3 Button	8
Microsoft Mouse	27
Logitech Mouse	28
Logitech Trackman	72
250W Power Supply	35
Mini Tower or Desktop Case w/PS	43
Mid/Full Tower Case w/PS	63/86
Colorado Tape Back-Up 250 MB	139
Conner 420 MB Tape Backup	170
Conner 250 Tape Back-Up Int	135
486 CPU Cooling Fan	7
Speakers 40 Watts	33
Speakers 80 Watts	43
Speakers 120 Watts	59
Pentium CPU Cooling Fan	10
16 Bit Ethernet Card	32

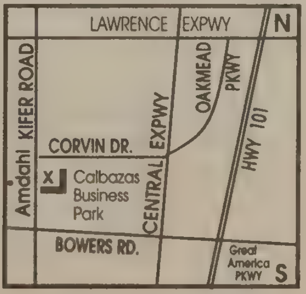
RAINBOW COMPUTERS

M-F: 9-6:30
Sat: 10-4

email: Rainbowcpt@aol.com

(408) 774-9005
3259 KIFER RD.
SANTA CLARA, CA 95051
Fax: (408) 774-9007

- COMPANY, GOVERNMENT EDUCATION, PO's WELCOME
- UPS Shipping Daily
- All Prices And Contents Subject To Change w/o Notice
- Prices Reflect Cash Discount, Terms On Credit Approval
- Not Responsible For Typographic Errors
- 1 Year Parts, 3 Years Labor Warranty

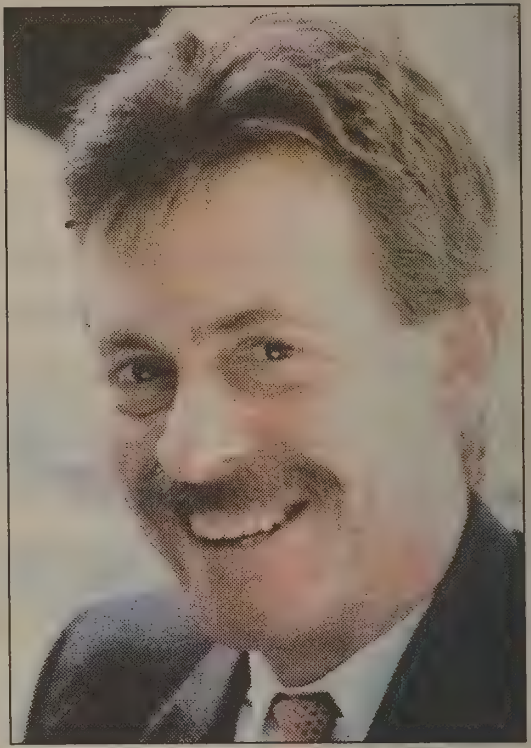


Grace In Cyberspace

The Legacy Of Tom Mandel

On March 25, Tom Mandel Started His Last Topic On The WELL.

Topic 1744 - My Turn
by A new pseud for a new life (mandel) Sat, Mar 25, 1995 (20:57)



I don't quite know how to say this... I'm not that ill with cancer yet but I am down to one lung and a lung that's not working very well...what it all comes down to is that I probably don't have a whole bunch of time left around these parts, I mean maybe I do and maybe I don't but I wouldn't throw a lot of money at these odds.

It's bad luck to say goodbye before it's time to do so and there's no point in embracing death before one's time, but I thought maybe I'd sneak in a topic, not too maudlin I hope, in which I could slowly say goodbye to my friends here, curse my enemies one more time <well, not really worth the trouble, actually>, and otherwise wave a bit at the rest of you until it's just not time to do so any more.

I could start off by thanking you all, individually and collectively, for a remarkable experience, this past decade here on the WELL. For better and for worse—there were a lot of both—it has been the time of my life and especially a great comfort during these difficult past six months. I'm sad, terribly sad, I cannot tell you how sad and griefstricken I am that I cannot stay to play and argue with you much longer. It seems almost as if I am the one who will be left behind to grieve for all of you dying.

So, thank you all, my best wishes and prayers to each and every one of you. It's been a fabulous life and it wouldn't have been the same without you.

In the analog and the digital worlds, Tom Mandel was a formidable presence. In matters ranging from tailoring and single-malt Scotch to rigorous analysis of technology trends, he maintained impossibly high standards, refined by Jesuit education, Marine training, Vietnam combat, and a distinguished career as a futurist at SRI. While orders of magnitude more elegant than most of us scruffy nerds at the Hackers Conferences he helped plan and run, Mandel was right at home with its deep-rooted impatience with limitations. When the real world and the frailty of mere humans (himself included) clashed with these standards, the results were often explosive.

During one particularly ballistic episode still referred to in hushed tones as "The Mandel Incident," Cliff Figallo, The WELL's director at the time, was compelled to exile him from the system, something he was clearly still troubled by years later. Not to worry, said Mandel's friend and provocateur Gerard van der Leun. Tom was back on the system using another ID within minutes!

Mandel was like that. Some are no doubt waiting for him to deal with death in a similar fashion.

In the weeks following his death on April 5, Mandel has been much eulogized in the press and elsewhere, with many allusions to his incalculable contributions to making the online world a more intelligent, varied, and interesting place. His most recent endeavor, the TIME Online forum on AOL which he cohosted with *TIME*'s Philip Elmer-DeWitt, was noteworthy not merely as the first example of successful online presence by a magazine, but for the sense of place Mandel created there, hanging out with the locals, starting topics, discussing whatever came up.

My former neighbor Cliff Stoll has a new book out, *Silicon Snake Oil*, in which he expresses grave doubts about the relative merits of cyberspace and reality. Remember, he advises, that an hour spent online is an hour not spent smelling roses, baking cookies, talking to the neighbors.

True enough. But as those of us who crowded into the church in Los Altos last week remarked, if it weren't for those hours spent online, we would never have met Tom Mandel. We would have missed his fits of irascibility, and we would also have missed those last luminous weeks on The WELL and AOL.

And it is there that I would direct you. Tom's postings are ubiquitous and varied—while dispassionately discussing bone metastases in one topic he was busily advising another WELLbeing as to the purchase of high-speed modems and predicting the demise of *Wired*. You won't run out of stuff to read for a long time.

You could do worse than to start with, on The WELL, the 600+ responses in News 1744. On AOL, in the TIME Online message boards Introductions folder, the parallel story begins to unfold in "Host Status Report" and continues through multiple generations of "Tom's Folder."

From time immemorial, great thinkers have tried to put a name to what you'll see there. The word Tom tended to use was "grace." Whatever it is, it is there in ascii for all to see, and it is as real and miraculous as the roses in Cliff Stoll's front yard.

—*ME*

LAP-TOP SUPERSTORE

Super Low Prices
Professional Atmosphere

Laptop Superstore Accepts

VISA · MasterCard · DISCOVER · American Express

Corporate POs Welcome

SANTA CLARA LOCATION

3607 El Camino Real, Santa Clara, CA 95051
408/249-9888
Fax: 408/249-0860

MON-FRI 9:30am-8:00pm
SATURDAY 10:00am-7:00pm
SUNDAY 11:00am-6pm

SAN FRANCISCO LOCATION

250 Bush Street, San Francisco, CA 94104
415/291-8008
Fax: 415/291-8115

MON-FRI 9:00am-6:00pm
SATURDAY 10:00am-5:00pm
SUNDAY Closed

TOSHIBA

T2150CDS

- 486DX4/75
- 4MB/500MB HDD
- With Built-in CD-ROM

From $3,799.99

Pentium T4900

8MB RAM 810MB HDD

From $5,799.99

Panasonic

Office Automation

MULTI-MEDIA CF-41

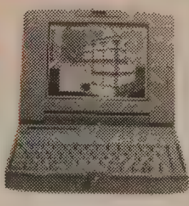
- 4MB/8MB RAM exp. to 40MB
- 260/450/680MB HDD
- 1 PCMCIA Type III or 2 Type II
- Built-in Trackball
- Built-in 5.25" CD-ROM

DX2/50CS	4/260	$3,279.99
DX2/50CT	8/260	$4,189.99
DX4/100CS	8/260	$3,909.99
DX4/100CT	16/680	$6,189.99

•• Pentium Model In Stock Now •• *Call for Price*

NEC

Versa P Series



- 8MB/540MB HDD
- 2 Type II or 1
- Type III PCMCIA
- Built-in Sound Card

From $4,739.99

Versa S DX2/50
4MB RAM/260MB HDD $2,299.99

•• also available Versa E, V & M ••

TEXAS INSTRUMENTS

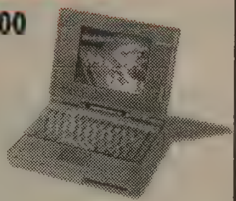
- 486SX/25
- 4MB/120MB HDD
- PCMCIA Expandability
- Trackpoint Built-in
- Audio In/Out Microphone Jacks
- SCSI-II Port Built-in

TI4000M

DX2/50CS	4/340	$2,219.99
DX4/75CT	4/455	$3,079.99
DX4/100CT	4/524	$3,529.99

SHARP

PC-8900

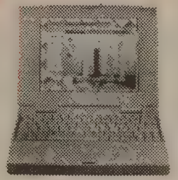


- 486DX4/75
- 8MB RAM
- 320MB HDD
- 2 Type II or 1 Type III PCMCIA slot
- GlidePoint
- 16 bit Sound Card Built-in
- 3 Years Warranty

$3,769.99

EPSON®

ActionNote-866C



- 486DX2/66
- 4MB RAM
- 340MB HDD
- 2 Type II or 1 Type III PCMCIA slot
- Int. Modem

$2,449.99

ASCENTIA 810N — AST COMPUTER

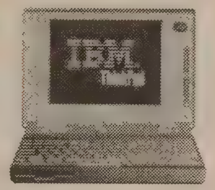
- 486DX2/66CS
- 4MB RAM
- 250MB HDD
- Integrated Trackball
- PCMCIA

From $2,029.99

Please call for AST Ascentia 910N Price

IBM

Thinkpad 755C



- 486DX4/75
- 4MB RAM
- 340MB HDD
- Integrated Trackpoint
- Active TFT Color

$5,999.99

MANNESMANN TALLY®

MOBILEJet

Portable Ink Jet Printer

$329.99

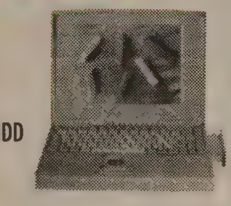
MANNESMANN TALLY®

MOBILEWriter

Portable Page Printer

$999.99

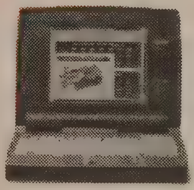
EVEREX



- 486DX2/50 DX4/75, DX4/100
- 4MB RAM
- 250/340/510MB HDD
- 2 Type II PCMCIA
- Built-in Sound Card

From $1,999.99

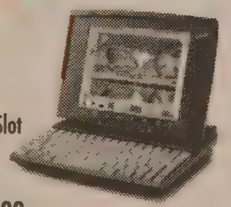
COMPAQ CONTURA™



- 486DX2/50
- 4MB RAM
- 350MB HDD
- Integrated Trackball
- PCMCIA

From $2,539.99

Avanti



- 486DX2/66
- 4MB RAM
- 200MB HDD
- 1 PCMCIA Type II Slot

$2,249.99

PCMCIA MODEMS

Megahertz Linking Your Worlds
NEW MEDIA CORPORATION
NOVALINK with Voice
Xircom Simply Expanding Connectivity
TDK®

RAM DISK HARD DISK DRIVES BATTERIES AVAILABLE

CD-ROMS

SONY NEC
Panasonic Office Automation
MicroSolutions

ORGANIZERS

NEWTON
PSION
SONY MAGIC LINK

Panasonic Office Automation · NEW MEDIA CORPORATION · COMPAQ · TOSHIBA · NEC · Megahertz Linking Your Worlds · AST COMPUTER · PSION · SHARP · IBM

All prices are subject to change without notice. All brand or product names are trademarks or registered trademarks of their respective companies.

"The Portable Computing Specialists"

• BOSTON, MA • CAMBRIDGE, MA • NATICK, MA • SALEM, NH • Comming Soon to NJ

Technical Expertise? Who can you trust to spend thousands of

UMiracle 486 Green VL VLB

READY TO GO

- 486 ISA VLB 256K Cache EPA Green Motherboard
- 4MB 70ns 72Pin SIMM RAM (4MB x 1pc)
- Fast 32Bit VLB Enhanced Mode-3/4 IDE Controller w/ 2S/1P/1G
- 1.44M TEAC Floppy Drive
- [illegible] Quantum E-IDE QM30540MVA HD
- Trident 9440 VLB 1MB Windows Accelerator
- 14" 1Kx768NI 0.28DP Digital Green Monitor
- Premium Digital Mini Tower 230W PS
- Mitsumi 101 Enhanced Keyboard

66DX2-$931
80DX2-$971
100DX4-$1021

UMiracle

UMiracle 486 PCI

READY TO GO

- 486 UMiracle ISA PCI 256K Cache Green Motherboard w/E-IDE, Floppy Port, High-Speed 2S/1P
- 8MB 70ns 72Pin SIMM RAM (8MB x 1pc)
- 1.44M TEAC Floppy Drive
- 540MB Quantum E-IDE QM30540MVA HD
- Trident 9440 PCI 1MB Windows Accelerator
- 14" 1Kx768NI 0.28DP Digital Green Monitor
- Premium Digital Mini Tower 230W PS
- Mitsumi 101 Enhanced Keyboard

66DX2-$1161
80DX2-$1201
100DX4-$1251

UMiracle

UMiracle Pentium PCI

[illegible]

- UMiracle 586 Pentium ISA PCI 256K Cache Green Motherboard
- [illegible] 70ns 72Pin SIMM RAM (4MB x 2pcs)
- IDE I/O with HD/FD & High Speed 16550 UARTs
- 1.44M TEAC Floppy Drive
- [illegible] Quantum E-IDE QM30540MVA HD
- Trident 9440 PCI 1MB Windows Accelerator
- 14" 1Kx768NI 0.28DP Digital Green Monitor
- Premium Digital Mini Tower 230W PS
- Mitsumi 101 Enhanced Keyboard

90MHz $1591
100MHz $1771

READY TO GO

Intel P5 Zappa PCI Triton

- Intel-made P5 Pentium Zappa PCI Triton Chipset Motherboard with Enhanced IDE, HiSpd Serials, Enhanced Parallel, 2.88MB Suppt
- 8MB 70ns 72Pin SIMM RAM (4MB x 2pcs)
- 1.44M TEAC Floppy Drive
- 730MB WD Enhanced IDE WD2700A HD
- Diamond Stealth 64 PCI S3-864 2MB DRAM
- Hitachi SuperScan 15S 0.28DP Green Monitor
- Premium Digital Medium Tower 230W PS
- Keytronic 101 Enhanced Keyboard

75MHz $1922
90MHz $2062
100MHz $226

Bug Free P5 - Guaranteed!!

[illegible]

Power system [illegible] AC adapter [illegible]

Audio function [illegible] playback voice [illegible]

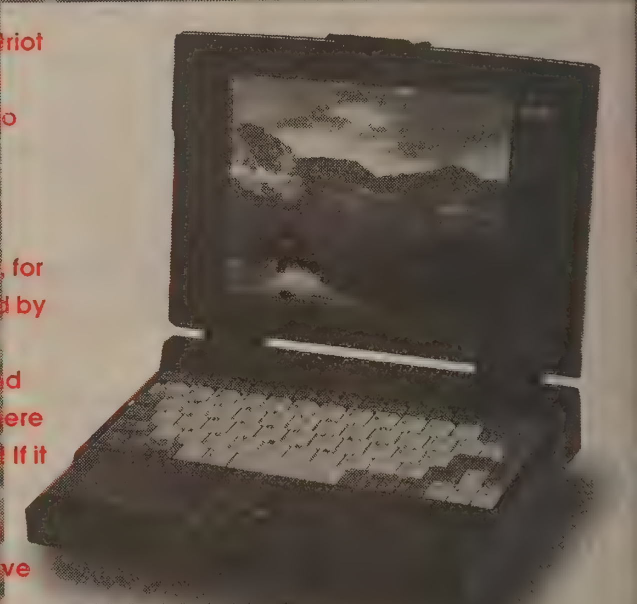
[illegible]

Power system [illegible] power supply

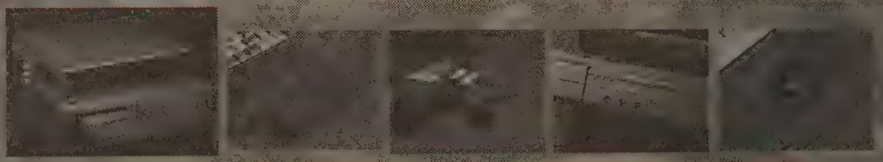
Physical [illegible]

Optional Devices [illegible] 5.25" SCSI device [illegible]

[illegible] Patriot [illegible] to [illegible] for [illegible] by UMiracle and ACOM [illegible] and [illegible] there [illegible] If it is brought to you by UMiracle, it is the best value [illegible] we have done the shopping so you don't have to.



ACOM Patriot 4000
Multi-Media Notebook



(340/520/710MB HD)	Monochrome	Dual Scan	Active Maxtrix
486DX2-50SL	$1380/$1490/$1645	$1690/$1800/$1955	$2585/$2695/$2850
486DX2-66SL	$1440/$1550/$1705	$1750/$1860/$2015	$2645/$2755/$2910
486DX4-100	$1535/$1645/$1800	$1845/$1955/$2110	$2740/$2850/$3005

*Call for Optional Upgrades - modem, memory, 10.3" Dual Scan, docking station, etc!!

UMiracle
UMIRACLE MICROSYSTEMS

34063 Fremont Blvd. Fremont CA 94538
Phone: 510-226-6746 Fax: 510-226-0700

1027 San Pablo Ave Albany CA 94706
Phone: 510-526-0271 Fax: 510-526-0273

1601 El Camino Real #E Belmont CA 94002
Phone: 415-592-3333 Fax: 415-592-5919

- ✓ Free Local Area Delivery for System Purchase
- ✓ 1 Year Parts and Life Time Labor Warranty
- ✓ No-on-hold Expertise LifeTime Tech Support
- ✓ While-Your-Wait Immediate Replacement/Repair Service
- ✓ 30 Day Money Back Compatibility Guarantee on Systems

Prices, availablity and specification subject to change without notice. Not responsible for typographical errors. All advertising prices reflect 2% check/money order/cashier check payment discounts. 15% restocking charge on all returned parts after 7 days your hard-earned dollars to custom build a machine that works?

Optional MS DOS [illegible] & Windows & MS Ergonomic Mouse + Pad - Add $12[illegible]

UMiracle P5 PCI 90/100MHz

- P5 Pentium PCI 256K Cache Motherboard with 3 PCI/5 ISA slots, Adaptec 7850 PCI Fast SCSI-2 onboard, E-IDE, FD, HiSpd IO with cables
- 16MB 70ns 72Pin SIMM RAM (8MB x 2pcs)
- 1.44M TEAC Floppy Drive
- Seagate 1.08GB Fast SCSI-2 ST31200N Fast SCSI-2 HD
- Diamond Stealth 64 Video PCI 2MB VRAM
- MAG DX17F 17" 1280x1024NI Green MPRII VESA DPMS Monitor
- Premium Digital Medium Tower 230W PS
- Keytronic 101 Enhanced Keyboard

Bug Free P5 - Guaranteed!!

90MHz $3126 Business leasing: $136

100MHz $3306 Business leasing: $146

AIR P5 Tornado EP EISA PCI 90/100MHz

- AIR P5 Pentium Tornado EP EISA PCI 512K Cache Motherboard with 3 PCI/4 EISA slots, Adaptec 7870 PCI Fast WIDE SCSI-2 & Fast SCSI-2 onboard w/cable HiSpd 16550 Serials, Enhanced Parallel, onboard 2.88MB Floppy interface
- 16MB 70ns 72Pin SIMM RAM (8MB x 2pcs)
- 1.44M TEAC Floppy Drive
- Seagate 2.1GB Fast Wide SCSI-2 68Pin ST32550W 1" HD w/ Cable
- Diamond Stealth 64 PCI S3-964 2MB VRAM
- MAG DX17F 17" 1280x1024NI Green MPRII VESA DPMS Monitor
- Premium Digital Medium Tower 230W PS
- Keytronic 101 Enhanced Keyboard

Bug Free P5 - Guaranteed!!

90MHz $4011 Business leasing: $177

100MHz $4191 Business leasing: $185

AIR Dual P5 Tornado 54CDP EISA PCI 90/100MHz

- AIR Dual Pentium 54CDP Tornado EISA PCI 512K Cache Motherboard with 2 PCI/5 EISA slots, onboard Adaptec 7870 PCI Fast WIDE SCSI-2 & Fast SCSI-2, HiSpd 16550 Serials, Enhanced Parallel, Floppy interface
- 32MB 70ns 72Pin SIMM RAM (16MB x 2pcs)
- 1.44M TEAC Floppy Drive
- Seagate 2.1GB Fast Wide SCSI-2 68Pin ST32550W 1" HD w/ 68Pin Cable
- Diamond Stealth 64 PCI S3-964 2MB VRAM
- MAG DX17F 17" 1280x1024NI Green MPRII VESA DPMS Monitor
- Premium Digital Full Tower 250W PS
- Keytronic 101 Enhanced Keyboard

90MHz $4599 Business leasing: $[illegible]

100MHz $4779 Business leasing: $211

Bug Free P5 - Guaranteed!!

MultiMedia Upgrade

-Plextor 4-Plex SCSI QuadSpd PX-43CH, 600KB/S, 200ms*
-SoundBlaster 32 AWE w/ASP
-120W MultiMedia Stereo Amplified Speakers
-Audio Cable
*Require System SCSI Interface
$775
Plus 10% off any CD-titles

-Toshiba 3601B SCSI-2 4XSpd, 120ms, 600KB/S*
-SoundBlaster 32 AWE Value
-120W MultiMedia Stereo Amplified Speakers
-Audio Cable
*Require System SCSI Interface
$595
Plus 10% off any CD-titles

-Toshiba 3601B SCSI-2 4XSpd, 120ms, 600KB/S
-SoundBlaster SCSI w/ASP
-TopTek Stereo Speakers 80W Amplified Channels
-Audio Cable
$549
Plus 10% off any CD-titles

-Mitsumi FX-400 QuadSpd, ATAPI IDE CD-ROM*
-SoundBlaster 16 Value
-TopTek Stereo Speakers 80W Amplified Channels
-Audio Cable
*Require System E-IDE Interface
$343
Plus 10% off any CD-titles

-Sony CDU-55E DoubleSpd, ATAPI IDE CD-ROM*
-SoundBlaster 16 Value
-Media 690 Hi-Fi Amplified Stereo Speakers
-Audio Cable
*Require System E-IDE Interface
$258
Plus 10% off any CD-title

Bay Area is a great place when it comes to shopping for a computer - Only if you know what you are buying though. Buying from a PC builder who doesn't even know what AUTOEXEC.BAT is means throwing your money away and you will end up with pointing fingers here and there. Buying from a PC Integrator like UMiracle means plug and run, peace of mind for your computing life. Afterall, who else cares what those jumpers should be set, whether it is running optimally, and how it works with your software? Think smart, think UMiracle !

[illegible], Our Commitment

- All complete systems are assembled, jumpers and switches setup/configured, DOS V6.22, Windows V3.1 and all included software installed for testing purpose, high resolution video monitor mode tested and continously burned in for 48 hours on all components and finally interactively inspected for trouble-free operation. All systems are to be visual inspected by customer at pick up time.
- Systems marked with "READY-TO-GO" have been pre-built, burn-in tested and are ready to be picked up or delivered within 30 minutes IN FREMONT MAIN OFFICE - Please allow more time for minor configuration changes. Standard delivery time is 72hours.
- Free delivery area includes local area within 30 minute driving distance. No delivery on weekends. Delivery out of local area will be charged up to $30 freight.
- Most components come with over 1 year manufacturer warranty - First year will be covered by UMiracle. Warranty after the first year will be covered by component manufacturers.
- While-you-wait immediate service should there be any neccessary warranty repair. If we couldn't solve the problem, another system will be built (at our discretion, if purchased within 30 days.)
- All pickups, repairs, exchanges, upgrades can be done in either Fremont Belmont or Albany store. Original invoices & records required.

Ph:510-526-0271

ALBANY BRANCH STORE:
1027 San Pablo Ave.
Albany CA 94706
Phone: 510-526-0271
Fax: 510-526-0273

Business Hour
Mon to Sat 9:30AM-7:00PM
Sunday 10:30AM-6:00PM
Yes! Open on Sunday!

Albany Exit
Marin Ave
N
S
80N
San Pablo Ave
UMIRACLE
Gilman St

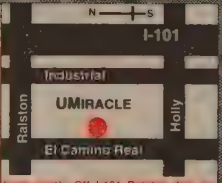
Off I-80 Albany Exit: go toward the hill and turn right on San Pablo Avenue. We are facing U.C. Village. Or off I-80 Gilman St. go toward the hill and make left to [illegible]

VISA MasterCard Discover ATM

Ph:415-592-3333

BELMONT BRANCH STORE:
1501 El Camino Real #E
Belmont CA 94002
Phone: 415-592-3333
Fax: 415-592-2919

Business Hour
Mon to Sat 9:30AM-7:00PM
Sunday 10:30AM-6:00PM
Yes! Open on Sunday!



From north: Off I-101 Ralston Ave towards west, left on El Camino Real and make a U turn. From south: exit Holly to right on El Camino Real. 3 minutes down [illegible]

VISA MasterCard Discover ATM

Ph:510-226-6746

FREMONT MAIN OFFICE:
44063 Fremont Blvd.
Fremont CA 94538
Phone: 510-226-6746
Fax: 510-226-6758

Business Hour
Mon to Sat 9:00AM-7:00PM
Sunday 10:00AM-6:00PM
Yes! Open on Sunday!

Auto Mall Pkwy (Old [illegible])
N
S
S880N
Grimmer Blvd.
Technology Dr.
UMIRACLE
Fremont Blvd.

Off [illegible] Auto Mall Pkwy East pass [illegible] Fremont Blvd. [illegible]

VISA MasterCard Discover

COMPONENTS/UPGRADES

Add and subtract to make your dream machine!

Add and subtract to make your dream machine!

Motherboard without CPU: (Call for CPU Prices)

486 UMiracle Green ISA VLB 256K - 3 VLB, upto 128MB & 512KB Cache, Support 30 & 72Pin SIMM, P5 OD suppt, ZIP, Full Deep Green PC EPA compliance - shut off HD, Green Monitor, CPU Slow Down, etc, Award BIOS, Onbrd 3.3V CPU Suppt	$99
486 UMiracle Green ISA PCI 256K with Enhanced IDE, I/O,upto 128MB & 1MB Cache, support 72Pin SIMM, P5 OD suppt, ZIP, Full Deep Green PC EPA compliance - shut off HD, Green Monitor, CPU Slow Down, etc, Award BIOS, Onbrd 3.3V CPU Suppt	**$185**
Pentium P5-75/90/100 PCI 256K 75/90/100MHz 256K cache, upto 128MB & 1MB cache, suppt 72Pin SIMM, 4 ISA & 4 PCI Slots, Award Green BIOS	**$220**
Pentium Intel Zappa PCI with NEW Triton chipset 75/90/100/120MHz, suppt Fast Page or EDO 72Pin SIMM upto 128MB, built-in PCI-IDE & ISA IDE Interface, FD, 2 hi-spd Serials, enhanced Parallel, support Enhanced IDE LBA Mode-3, support 4 IDE HDs. Flash AMI, ROM,PwrSaving	**$370**
P5 Pentium P5-90/100MHz PCI 256K cache - suppt 72Pin SIMM, upto 192MB, upto 1MB cache , 5 ISA & 3 PCI slots, SIS chipset, with built-in Adaptec SCSI-2 AIC 7850 controller (AHA-2940 equvialent) supporting 50Pin Fast SCSI-2, onbrd Enhanced IDE, Floppy port, High Speed 16550 UART serial ports, Enhanced Parallel port, 50pin SCSI , IDE & Floppy cables & complete software included (Call for optional on-brd 68Pin Wide-SCSI-2)	$495
Pentium 586 AIR-EP 90 Tornado 512K 90/100MHz EISA/PCI 2 PCI/4 EISA(ISA compatible) Slots, ZIF, Intel Mercury Chipset, Upto 128MB by 72Pin SIMM, Bus-master, AMI BIOS, 32-bit PCI bus-mastering SCSI ports using Adaptec AIC 7870 controller (AHA-2940W equvialent) supporting 50Pin Fast SCSI-2 & 68Pin Fast WIDE SCSI-2, onbrd floppy ports supporting 2.88MB, High speed 16550 UART com1 and com2 ports, bi-directional enhanced parallel port, 50pin SCSI cables & complete sftwre included	$670
Pentium 586 AIR-54CDP Dual 90 Tornado 512K - 90/100MHz EISA/PCI - 2 PCI/5 EISA(ISA compatible) Slots, ZIF, Intel Neptune Chipset, Upto 512MB by 72Pin SIMM, Bus-master, AMI BIOS, 32-bit PCI bus-mastering SCSI ports using Adaptec AIC 7870 controller (AHA-2940W equvialent) supporting 50Pin Fast SCSI-2 & 68Pin Fast WIDE SCSI-2, onbrd floppy ports supporting 2.88MB, High speed 16550 UART com1 and com2 ports, bi-directional enhanced parallel port, 50pin SCSI cables and complete software driver included	$880

CPU & Memory: (Prices Subject to Change Daily)

Pentium P5-60/66/90/100MHz CPU	$Call
Intel 486-66DX2/100DX4	$Call
AMD 486-66DX2/80DX2/100DX4 3.3V or 5V	$Call
CPU on-Socket Voltage Regulator 5V to 3.3V	$40
8Kx8/32Kx8/64KX8/128Kx8 Cache SRAM	$2/$5/$14/$32
1MB Video DRAM (256Kx16-70ns DRAMx2pcs)	$60
2MB Video VRAM (256Kx8-70ns VRAMx8pcs)	$160
4MB RAM SIMMs (1M-70ns 30-Pin SIMMx4pcs)	$Call
16MB RAM SIMMs (4M-70ns 30-Pin SIMMx4pcs)	$Call
72Pin 70ns RAM SIMM (4/8/16/32/64MB)	$Call

I/O Card/Controller Card/Network Card:

Single/Dual Parallel Printer Card	$8/15
8 Bit AT I/O 2S/1P/1G	$10
8 Bit AT I/O 2S/1P/1G w/ 2 HiSpd UART 16550's	$35
16 Bit IDE/2FD with 2S/1P/1G	$10
16 Bit IDE/2FD with 2S/1P/1G 2.88MB support, HiSpd 16550 UART's on Serial ports	$29
VLB 32 Bit Enhanced 4-IDE/2-FD 2S/1P/1G Controller Supporting 4 Mode3 & 4 E-IDE devices	$28
VLB 32 Bit Enhanced 4-IDE/4-FD 2S/1P/1G Controller Supporting 4 Mode3 & 4 E-IDE devices, 4 Floppy drives including 2.88M, hi-spd 16550 UARTs, bi-directional ECP/EPP Parallel	$50
Adaptec 2940 PCI Fast PCI SCSI-2 Kit	$265
Adaptec 2940W PCI Fast WIDE SCSI-II, 20MB/s burst, 15 SCSI devices support with 50 & 68Pin ribbon cable Complete Kit with software	$325
SideGold VLBus Fast SCSI-2, Enhanced-IDE w/ high-speed I/O Controller - Implement with latest Adaptec SCSI 6360 chip supporting HD > 2GB, up to 10MB/Sec DTR, complete EZ-SCSI Software, support E-IDE HD > 528MB, Mode 3 protocol, compatible with ATAPI E-IDE devices. 2 hi-speed 16550 UART serial ports, programmable baud rate generator, bi-directional multi-mode parallel port with ECP/EPP, user friendly jumperless design	$165
External SCSI-2 50Pin Micro-D Adapter for any onboard internal 50pin ribbon cable SCSI interface	$30
Ethernet NE2000 Adapter Coaxial/10-Base T/Combo	$40/$40/$50
3COM Etherlink III - 3C509 16bit Coax/10-baseT	$100
3COM Etherlink III - 3C509 16bit Combo	$110
3COM Etherlink III - 3C579 EISA 32bit 10-baseT/Coaxial	$225
PCI Ethernet Network Card	$Call

Video Card:

Trident 9440 Windows Accelerator PCI/VLB 1280x1024, 16.7Million Color 1MB/2MB	$75/135
Diamond Stealth 64 PCI 64Bit Graphic Engine S3-864 2MB DRAM	$165
Diamond Stealth 64 Video PCI 64Bit Graphic Engine S3-964 2MB/4MB VRAM Version	**$280/440**
ATI Win Turbo Pro PCI 2/4MB VRAM	$255/455
ATI Graphic Turbo Pro PCI 2/4MB VRAM	$355/545
Matrox Impression Plus PCI 2MB VRAM	$380
2MB VRAM upgrade board for Impression Plus	$250
Matrox/Number Nine/Hercules Video Card	$Call

Monitor:

14" ExView1Kx768NIx0.28DP Digital Ctrl Green	$220
15" ExView1280x1KNIx0.28DP Digital Ctrl Green	$315
Hitachi SuperScan 15S 15" NI, 1280x1024, 0.28DP, FlatScreen, EPA Green, Digital Controlled	$395
MAG DX17F 17" Digital Control 30-64KHz, .26DP, upto 76Hz, 1280x1024NI, Green, MPRII, VESA DPMS	$655
Sony CPD-15SF 15" Trinitron 0.25DP 1280x1024, Green Support, 3 Year Manufacturer Warranty	$430
Sony CPD-17SF 17" Trinitron 0.25DP 1280x1024, Green Support, 3 Year Manufacturer Warranty	$830
Viewsonic, NEC, Nanao, Nokia, Monitor	$Call

Modem:

Digicom 14.4K Fax/Data Internal 16550 UART	$60
Digicom 28.8K V.34 Fax/Data Internal 16550 UART	**$185**
US Robotics Sportster 14.4K Data/Fax 16550UART V32.bis, V.32, V.42 Internal/External	$95/115
US Robotics Sportster 28.8K V.34 Data/28.8K Fax, 16550UART, Internal	$205

Floppy Drive/Tape Backup:

Teac 1.2M 5.25"/1.44M 3.5"	$44/35
Teac Dual 1.44M & 1.2M Combo	$92
Colorado 350MB TapeBackup Internal QIC-80	$165
3M Tape Cartridge 350MB QIC-80 pack of 3	$60
Conner 420MB TapeBackup Internal QIC-80 w/Tape	**$175**

KeyBoard/Mice/Software/Chassis/PS/Misc:

MicroSoft Natural Keyboard	$90
Mitsumi 101 Enhanced Keyboard	$15
KeyTronic 101 Enhanced U.S. Made	$25
Focus 2001 101 Enhanced Click w/Cover	$32
Focus 8000 111 with Calculator	$40
Focus 9000 129 Programmable w/Calculator	$55
NorthGate OmniKey 101NI/102	$74
MS Compatible 3-Button Mouse	$7
MicroSoft Ergonomic Serial Mouse	$35
Logitech Mouseman Serial	$45
MS DOS/6.22/Windows V3.11/WFWG V3.11	$45/45/65
Premium Case w/230W Mini/Desktop/Med	$55/60/80
Premium Case w/250W Full Size Tower	$100
Power Supply PS-II Type 230W	$28
486 CPU Cooling Fan with heat sink	$8
P5 90/100MHz CPU Cooling Fan w/heat sink	$16
Chassis Second Cooling Fan 3" or 3.5"	$15
Motherboard Crystal for 25/33/40/50/66/80MHz	$5
Printer Cable 10"/15"/25"	$7/9/16
FAST WIDE SCSI-2 Internal Ribbon Cable, hi-density, 68Pin, 2 connectors / 3 connectors	$35/45
SCSI Cable Centronic to Micro-D 50Pin 3"	$39
SCSI Cable Centronic to Micro-D 68Pin 3"	$69
SCSI Cable Micro-D 68Pin to Micro-D 68Pin 6"	$99

CD-ROM Drive:

CD-ROM ISA Controller w/Software for Panasonic, Mitsumi, Sony	$15
Sony CDU-55E Double Speed ATAPI IDE 250ms caddyless software driver included	$115
Mitsumi FX-400 Quad Speed ATAPI IDE	$190
Toshiba FM-5302B QuadSpd IDE 256K Cache 150ms, 600KB/Sec Sustained, MultiSpin/Spd Internal	**$195**
Toshiba XM-3601B QuadSpd SCSI-2 256K Cache 120ms, 600KB/Sec Sustained, MutlSpin/Spd Internal	**$305**
TEAC CD-55 Quad speed AT 195ms, 600kb/sec, Sound Blster interfce compatible, w/cable & software	$215
Plextor 4-Plex QuadSpeed PX-43CH 600Kb/sec, 220ms, 1MB Buffer, 2-yr warranty	$415
CD-ROM Caddy	$5

Sound Card/Speaker/MultiMedia Package

Media 690 Hi-Fi Amplified Stereo Speakers	$40
80W TopTek Amplified Stereo Speakers	$50
120W MultiMedia Amplified Speakers	$65
Sound Blaster 16 Value Edition	$98
Sound Blaster 16 SCSI	$169
Sound Blaster 16 SCSI with ASP	$199
Sound Blaster 16 MultiCD	$139
Sound Blaster 16 MultiCD with ASP	$169
Sound Blaster 32 AWE Value	$220
Sound Blaster 32 AWE with ASP	$290
Audio Cable - CD-ROM to Sound Card	$5
Sound Blaster Digital School House Kit	$265

Hard Disk

Western Digital	
540MB IDE WDAC2540 - Enhanced IDE ATAPI	$220
730MB IDE WD2700A - Enhanced IDE ATAPI	$255
850MB IDE WD2850A - Enhanced IDE ATAPI	$280
1080MB IDE WD31000A - Enhanced IDE ATAPI	$365
1.2GB IDE WD31200A - Enhanced IDE ATAPI	$410
Quantum	
540MB IDE QM30540MVA 12ms	$185
540MB SCSI-2 QM30540MVS 12ms	$205
Seagate	
1.0GB ST31200N Fast SCSI-2, 9ms, 3.5"	$535
2.1GB ST32550N Fast SCSI-2, 8.5ms, 3.5"	$1045
4.3GB ST15230N Fast SCSI-2, 9ms, 3.5"	$1345
9.0GB ST410800N Fast SCSI-2, 11.5ms, 5.25"	$3195

FAST WIDE SCSI-2 HARD DISK (68Pin Wide Connection)

Seagate ST32550W 2.1GB Fast Wide SCSI-2 1"	$1245
Seagate ST15150W 4.1GB 8ms Fast Wide SCSI-2	$1855
Seagate ST410800WD 9.0GB 11.5ms Fast Wide	$3599

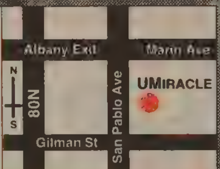
PC Upgrades and Service Welcome Our Technical Staff can Troubleshoot and Pinpoint your Problem Fast!

International Order Welcome, we ship to you FedEx daily!

Ph:510-526-0271

ALBANY BRANCH STORE
[illegible] San Pablo Ave
Albany CA [illegible]
Phone: 510 [illegible] 0271
Fax: 510-526-0273

Business Hour
[illegible]



[illegible]

VISA MasterCard Discover ATM

Ph:415-592-3333

BELMONT BRANCH STORE
1501 El Camino Real #E
Belmont CA 94002
Phone: 415-592-3333
Fax: 415-592-2919

Business Hour
[illegible] to Sat 9:30AM-7:00PM
[illegible] 10:30AM-6:30PM
[illegible] Open on Sunday!

N
S
I-101
Industrial
UMIRACLE
Ralston
Holly
El Camino Real

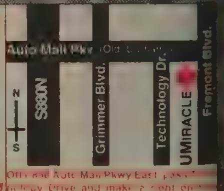
[illegible] I-101 Ralston Ave [illegible] El Camino Real [illegible]

VISA MasterCard Discover ATM

Ph:510-226-6746

FREMONT MAIN OFFICE:
[illegible] Fremont Blvd
Fremont CA 94538
Phone: 510-226-6746
Fax: 510-226-6758

Business Hour
Mon to Sat 9:00AM-7:00PM
Sunday 10:00AM-6:00PM
[illegible] on Sunday!



[illegible] Auto Mall Pkwy East [illegible] Drive and make a [illegible] Fremont Blvd. [illegible]

VISA MasterCard Discover

Online Guide

INTERNET • BY JOHN S. QUARTERMAN AND SMOOT CARL-MITCHELL

All The Data That's Decent?

S. 314, A Well-Meant Bad Idea

The US Senate is currently considering a bill (S. 314, introduced 1 February 1995), that would amend the Communications Act of 1934 to apply to whoever

> *(A) makes, transmits, or otherwise makes available any comment, request, suggestions, proposal, image, or other communication which is obscene, lewd, lascivious, filthy, or indecent;*

Several other clauses expand on this idea, and then the penalty is given: anyone who

> *(2) knowingly permits any telecommunications facility under his control to be used for any purpose prohibited by this section, shall be fined not more than $100,000 or imprisoned not more than 2 years, or both.*

It gets worse. The bill later explicitly says that simply permitting delivery of content prohibited by the Act is punishable by a fine or imprisonment.

Attempting to claim common carrier status won't help, either; the bill explicitly says that is not a defense.

Trying to disclaim responsibility for traffic that came from overseas won't work, either: the wording explicitly refers to "interstate or foreign commerce."

If this bill is meant to apply to the Internet or Usenet or FidoNet or even BBSes, its effects will be profoundly bad.

In other words, **the only way to satisfy the prohibitions of this bill** would be to not provide networked communications services at all.

A Closer Look

Can this possibly be the intent?

Well, the bill is entitled "The Communications Decency Act of 1995." That sure sounds like a clue, but perhaps the language is accidentally overly broad. Let's look at it carefully. (The entire bill and its effects on the Act of 1934 are available in several places online, including *http://www.zilker.net/senate/s314.html*).

Almost everywhere the word "telephone" currently appears in the Act of 1934, the proposed new wording replaces it with much broader terminology, such as "communications device" or "communications facility." Maybe this is supposed to mean traditional communications facilities, and not computer networks? The bill's language is very unfortunate, but maybe it's just a matter of accidental miswording and its sponsors can be persuaded to correct it?

Unfortunately, not. After the *New York Times* editorialized against the bill, its sponsor, Senator Jim Exon from Nebraska, responded in a letter to the editor of 31 March 1995 in which he states:

> *My amendment would simply apply the same laws that protect against obscene, indecent or harassing telephone calls to computers. Is that an infringement on free speech? I want to make the information superhighway safe to travel for children and families.*

The Senator clearly argues that restrictions appropriate to person-to-person telephone calls are completely appropriate to the diverse media supported by computer networks.

Every computer in the worldwide Matrix of computers that exchange electronic mail by definition does indeed have a one-to-one communications service that is closely analogous to telephone calls. Some networks, in particular the Internet, add interactive one-to-one services such as talk, voice, and video. If all the bill did was to prohibit the use of such services for harassment, it would indeed be unremarkable. It would also probably be redundant, since harassment is already illegal, regardless of the communications medium used for it.

But the bill does not address itself to specific services or types of services. It repeatedly says "telecommunications device," "telecommunications service," "common carrier," and otherwise makes it very clear that its prohibitions apply regardless of the specific delivery mechanism, as long as it involves telecommunications. So the bill would also apply to one-to-many services such as electronic mailing lists, which are more analogous to newsletters, newspapers, or radio or television programs. It's not clear that the *New York Times* could continue to publish all its current contents if this bill applied to print media.

The bill also applies to Usenet newsgroups, which are many-to-many and don't really have close analogs in other media, except when they are simply being used as big broadcast channels. Of course, certain Usenet newsgroups would be problems under this bill. And the bill would not be satisfied by having schools not carry those newsgroups; it requires *all* telecommunications carriers not to carry them! It's rather as if no adults were permitted to subscribe to *Playboy* or *Playgirl* because children might read them. Just keeping those publications out of school libraries wouldn't be enough; this bill, if it applied to print media, would prohibit their publication at all.

Only a small fraction of Usenet's ten thousand or so newsgroups are dedicated to material which might be considered "obscene, lewd, lascivious, or filthy" according to somebody's definition. However, the bill goes further: it also says "or indecent." So if a researcher posts an "indecent" word to a technical list or newsgroup, that is prohibited. Every telecommunications provider that carries that posting would be prosecutable, from the ISP that provides end-user accounts to the TCP/IP backbone carrier that passed it on to the ISP, and apparently even to the telephone company that leased the intervening cable.

> The Internet is the greatest **research, engineering, artistic, social, and commercial tool** to come along since the printing press. Making this tool conform to **the prohibitions of S. 314 would be impossible.** The only way would be to shut it down.

Surely no prosecutor would actually use such a far-fetched provision?

Well, recent history indicates otherwise; we can recount some of it in another column, if anyone has forgotten. Quite likely most prosecutors would not attempt to apply the new law right away, but any time any telecommunications provider came under suspicion for any other reason, this bill would provide a ready mechanism to shut it down and lock up everyone associated with it.

Can't ISPs simply remove objectionable material and leave that which is not? Well, no. As we mentioned, Usenet alone is impossible to police, because anyone might post an "indecent" comment to any newsgroup at any time. The only solution there would be to not carry Usenet. But then you would still have mailing lists, which have exactly the same difficulties, differing only in having a smaller scale. So perhaps an ISP could refuse to provide mailing lists to its customers. How? Incoming mailing list mail is simply individual mail messages. You would have to not provide electronic mail.

In other words, the only way to satisfy the prohibitions of this bill would be to not provide networked communications services at all.

The Real, Networked World

Surely we exaggerate? If everyone were covered by the bill, no one would post even "indecent" comments?

But not everyone would be covered by the bill, even as a law: the Internet extends to more than ninety countries throughout the world, and these communications services reach more than 110 countries. An incoming message could come from any of those countries, of which only one is covered by US law.

It is the nature of this technology, which can deliver a message from Amsterdam to Peoria in seconds, that there are no international borders. It is certainly not desirable to establish them; free flow of information is the lifeblood and meaning of networked communications. Suppose, nonetheless, that it were possible to establish borders in cyberspace corresponding to mundane political borders. The direct effect would be to handicap the United States in a technological area in which it currently leads the world.

The Internet, unlike most other parts of the Matrix, is of course more than communications services. Neolithic French cave paintings are available worldwide within months of their discovery; the Space Shuttle is directly accessible in real time in space; even the US President and the Japanese Prime Minister have electronic mail addresses and make information available online.

Millions of computers, thousands of databases and terabytes of files are accessible interactively through the Internet. Millions of documents are available by Gopher and hypertext links by the World Wide Web. This mesh of links and information is constantly changing, in real time, even as we use it. These interactive resources, in addition to communications services, are the reason the Internet is the greatest research, engineering, artistic, social, and commercial tool to come along since the printing press.

Making this tool conform to the prohibitions of S. 314 would be impossible. The only way would be to shut it down. This solution has been tried elsewhere. The government of Hong Kong early this year did shut down all but one commercial Internet provider in that country on the pretext of lack of a $200 license. It will be very interesting to see if they stay shut down.

Would the same thing work in this country, with forty times as many people and three hundred times as many Internet hosts? Perhaps. More likely the new law would be selectively applied by prosecutors, which would in itself have a deadening effect. Either way, it should not be passed.

The Senator Asks:

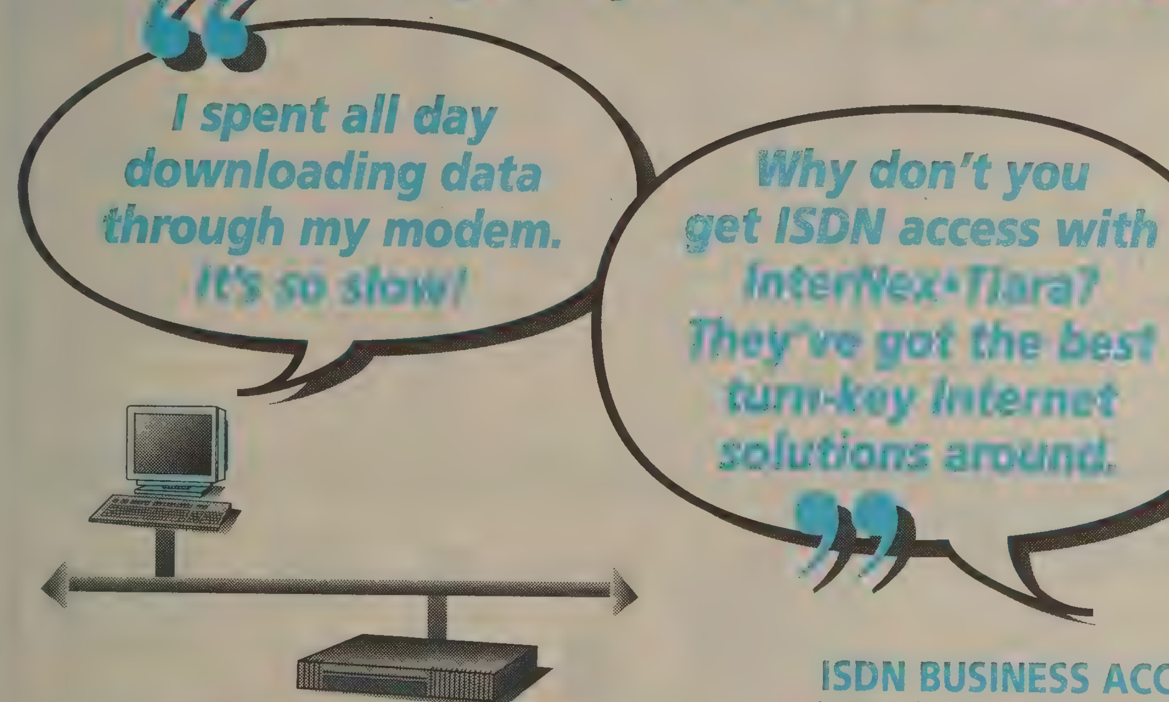
"Do you really believe that the Framers of the Constitution intended to protect pornographers and pedophiles?"

In a world where the definition of pornography differs per county, state, and country, and where a mother can be arrested for pedophilia because of nursing her child too long (that happened in New York State), yes, we believe that accusations of pornography and pedophilia are exactly the sort of arbitrary injustice the Framers of the Constitution intended the First Amendment as protection against. We certainly hope that this bill, if enacted into law, will be challenged in the courts.

Think of what the prohibitions of S. 314 would mean if they were applied to bookstores and book publishers. Most novels published these days would be banned, as would numerous nonfiction accounts of almost anything from the Bosnian War to the O.J. Simpson case. Sound far-fetched? Unfortunately, not; it's happened before.

Up until 1933 a charge of pornography was

InterNex•Tiara Makes *The Right Connection* with Ascend Routers and *High Speed ISDN Internet Access!*


"I spent all day downloading data through my modem. It's so slow!"
"Why don't you get ISDN access with InterNex•Tiara? They've got the best turn-key Internet solutions around."

Novell, LAN, Unix Resellers are welcome to inquire about our Authorized POP (Point-of-Presence) Program. Call Ext. 336

ISDN SURFER ACCOUNT

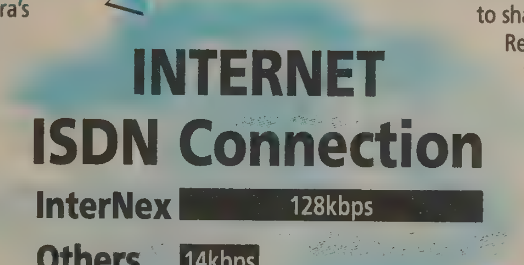
Now Only $995!!

Ideal for the serious Internet user, InterNex•Tiara's ISDN Surfer Account let's you access the World Wide Web at speeds of up to 128kbps! Perfect for an upgrade from SLIP, PPP or UUCP modem connections. Enjoy working at home or the office at up to 10 times the speed of a 14.4 modem.

Start-Up Surfer Accounts include

- Ascend Pipeline 50hx ISDN/IP Ethernet Router
- Single IP address
- E-mail
- High Speed News Feed
- Mosaic and FTP access
- Metered rate plan
- 30 free hours per month

Starts for as little as $29 per month!



ISDN BUSINESS ACCOUNT

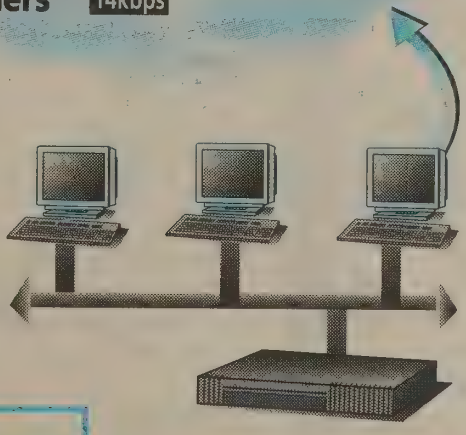
InterNex•Tiara's ISDN Business Accounts are designed for networks of 2-10 hosts up through large LANs with 250 hosts or bigger! Includes IP filtering for security and high performance. Ideal for small, medium and large businesses with a mix of PCs, Macintoshes and Unix workstations needing to access the Net at speeds of 128kbps and higher. Business accounts allow businesses to share the Internet connection with remote telecommuters and remote offices. Remote users can directly access the corporate LAN as well. Perfect for upgrades from SLIP, PPP or UUCP modem connections.

Start-Up Business Accounts Include

- Ascend Pipeline 50hx, 50 or 400 ISDN/IP Ethernet Routers
- Single or multiple IP addresses w/ own company domain name
- POP Mail or SMTP Mail (Small LANs)
- High Speed News Feed
- Mosaic and FTP access
- Metered or Fixed rate plans
- Dial-Back Services (optional)
- Web Server Hosting (optional)
- Server Co-locating (optional)

Starts for as little as $29 per month!

Fixed rate plans start at $199 a month!



InterNex Tiara

ISDN Internet Access Is Our Business

Matrix Marketplace Server Bureau℠

The InterNex•Tiara Server Bureau allows you to provide Internet presence for your company by hosting your Web Site on our servers. Effectively introduce your company to the World Wide Web using Mosaic, Netscape or other popular browsers. Realize a 24 hour sales and marketing presence on the Internet today! Server plans start at $50 per month.

For more information or for the nearest local access number **call 408-496-5466** today!

InterNex•Tiara is a leading ISDN and Frame Relay Internet service provider offering complete turn-key solutions for businesses and individuals.

2302 Walsh Avenue, Santa Clara, CA 95051
Tel. 408-496-5466 • Fax 408-496-5485 • Email: info@internex.net
Sales: sales@internex.net • Web Site: http://www.internex.net

Copyright ©1995 by Internex Information Systems and Tiara Computer Systems. All rights reserved. Matrix Marketplace is a trademark of Internex Information Systems. All trademarks and registered trademarks used herein are the property of their respective owners.

YOUR AFFORDABLE FULL SERVICE NETWORKING PARTNER

WINDOWS '95 DEMO AVAILABLE

Plug & Play/Ready To Run Network System
Novell Certified & FCC "B"

486DX2-66 File Server

- 486 DX2-66 Mhz VESA Local Bus 256K Cache Motherboard
- 16MB RAM, Upgradable to 64MB
- 1.0GB SCSI-II Hard Drive
- Adaptec 2842 VESA Local Bus SCSI Controller
- VGA Card w/ 14" VGA/Mono Monitor
- Teac 1.44 Floppy Drive
- Medium Size Tower Case w/ 230W Power Supply
- 101 Key Enhanced Keyboard
- 10BaseT/10Base2 Combo Ethernet Card
- Double Speed SCSI-CD-ROM Drive
- 2 Serial and 1 Parallel I/O Port

486SX-33 VLB Workstation

- 486 DX2-33 Mhz VESA Local Bus 128K Cache Motherboard
- 4MB RAM, Upgradable to 64MB
- VESA Local Bus SVGA Controller w/ 1MB
- 14" Non-Interlaced SVGA Monitor
- Teac 1.44 Floppy Drive w/FD/HD+I/O Controller
- Mini Tower Case w/ 200W Power Supply
- Mitsumi 101 Key Enhanced Keyboard & Mouse
- 10BaseT/10Base2 Combo Ethernet Card

Novell Netware V3.12

*5 User Network System $5,799
(1 File Server w/ 4 Workstation, & 8 port 10BaseT hub)

*10 User Network System .. $10,549
(1 File Server w/ 9 Workstations, & 12 port 10BaseT hub)

*25 User Network System .. $21,200
(1 File Server w/ 24 Workstations, & 32 port 10BaseT hub)

Network software will be pre-loaded, configured and tested. Please call for network cable installation price quotation.

486 VLB Multimedia System

- Green 486 VLB MB w/ 256K Cache
- DX CPU w/ Cooling Fan
- 8MB (2x32-70ns, 72 pins)
- 540MB IDE HDD
- VLB IDE I/O Card/Serial Mouse w/ Pad
- 1MB Cirrus Logic VLB SVGA Card
- Teac 1.44MB FDD/101 Key Keyboard
- 14" GVC Low Radiation NI SVGA Monitor
- Medium Size Tower Case w/ 230W PS
- Sound Blaster Value CD-16

	DX2/66	80	100MHz
AMD	$1299	$1329	$1369
intel.	$1379		$1439

w/ System Purchase

MS Office Pro V4.3 CD	$280
MS NT V3.5 WS CD	$250

Pentium Power Player System

- Pentium PCI MB w/ 256K (512K Optima)
- 8MB (1x32-70ns, 72 pins)
- Quantum 730MB LT EIDE HDD
- PCI IDE on Board w/ High Speed I/O
- 1MB DRAM Diamond Stealth 64 PCI SVGA
- Teac 1.44MB FDD
- 14.4 MAX Voice Fax/MOdem
- 101 Key Keyboard/Serial Mouse
- 15" Digital Control SVGA NI-Monitor
- Medium Size Tower Case w/ 230W PS

Pentium 100MHz	$2120
Pentium 90MHz	$1979
Pentium 66MHz	$1679
Pentium 60MHz	$1649
Toshiba 4X EIDE Multimedia Kit	$270

w/ System Purchase

Network Services

- Networking Need Analyst
- Network System Design
- Network System Installation
- Network System Integration
- Network Turnkey Solution
- Network Trouble Shooting
- Maintenance Service Contract

Network Solutions

- Software and Hardware
- File Server System
- Print Server System
- E-Mail Server & Gateway
- CD-ROM / Backup Server
- Fax & Dial-In / Dial Out Communication Server

Your Best One-Stop Internet Access Solution

- Lan to Internet Integration
- Shell, UUCP, SLIP/PPP, ISDN, Frame Relay, & Leased T1
- Domain Name Service (You Better Hurry Up)
- Security and Firewalls
- WWW Development
- Service and Support

AIMnet CORPORATION BUSINESS PARTNER

ISDN Special

- 56K / 1B $200/mo. ($400 init. setup)
- 112K / 2B $300/mo. ($600 init. setup)

& Special FLAT RATE ISDN available!

Telco & Equipment charges extra.

HEWLETT PACKARD AUTHORIZED DVAR
Authorized Peripheral Dealer
OS/2
PerfectFit
Novell Certified NetWare Engineer
File Server
Microsoft
Windows
Novell Authorized Dealer
proteon InterNet RESELLER PROGRAM
Microsoft SOLUTION PROVIDER
Novell Authorized UNIX Reseller
SCO AUTHORIZED DEALER
Lotus BUSINESS PARTNER
TELEMAGIC

Multimedia

CREATIVE

Sound Blaster 16 MCD	$75
Sound Blaster 16 SCSI II	$105
Discovery CD-16 (New)	$279
4X Multimedia Home Office	$395
Edutainment CD-16	$395
Multimedia Office CD-16	$499
Value CD-16	$239
MEDIAMAGIC MCD 16 Sound Card	$59
MEDIA VISION IDE 16 Sound Card	$49
MITSUMI 4X IDE CD-ROM	$185
TOSHIBA	
4X SCSI-II CD-ROM	$300
4X IDE Multimedia Kit, Media Magic MCD 16, Compton 95, 2W Speaker	$275
Joystick	$7
50W Lansonic Stereo	$39

PC Components

Motherboards

Pentium 90 Intel Chipset	$249
Intel Pentium 100 PCI	$360
Pentium 90 PCI VLB 256K	$250
486 PCI VLB (IDE on Board) 256K	$155
486 DX4/100 VLB 256K	$92

(From SX/25, DX/33, DX2/66, DX2/80, DX4/100 all compatible)

adaptec Controllers

AHA SCSI PCI 2940	$210
AHA SCSI VLB 2842	$210
AHA SCSI ISA 1542CF	$170

Fax/Modems

On-Line Fax/Modem Int.	$55
Max Voice Fax/Modem 14.4 Int	$59
UMC Fax/Modem 14.4 Int.	$49
On-Line 28.8 Fax/Modem Int./Ext.	$150/170

Network & Accessories

3Com	
3COM 3C 509-TP 1/5PK	$108/525
3COM 3C 509-Combo 1/5PK	$140/550
HEWLETT PACKARD	
HP Advance Stack 10BaseT Ethernet Hub 12/24/48 Port	$590/1008/1880
Lotus Notes®	
Lotus Notes Starter Pack for Windows	$880
Lotus Notes Starter Pack for Netware	$880
NOVELL	
Netware 3.12 (CD or Disk) 5/10/25 User	$499/1090/1600
Netware 4.10 (CD or Disk) 5/10/25 User	$550/1190/1720
with file server purhase	
intel.	
Ether Express 10 BaseT 1/5PK	$99/460
Ether Express Combo 1/5PK	$130/550

DELRINA	
WinFax Pro Network Starter Kit V4.0	$299
APC American Power Conversion	
APC Smart UPS 600 w/ Power Chute	$465
Microsoft	
MS NT Server 3.5 Upgrade	$139
MS Natural Keyboard	$79
MS Serial Mouse	$35
Logitech Trackball	$39
CONNER	
TapeStor 420MB	$150
COLORADO MEMORY SYSTEMS INC.	
Colorado DJ-35C 350MB	$145
Colorado DJ-20 250MB	$115

Computer Networking
Total Solutions

V88
Systems
Inc.

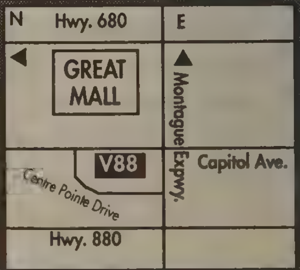
MINIMUM 20 USER NETWORK FOR FREE CONSULTATION

TERMS AND CONDITIONS:
V88 ACCEPTS VISA, MC, CASHIER'S CHECKS, WIRE TRANSFER, 2% CASH DISCOUNT. ONE YEAR WARRANTY ON PARTS & LABOR. 14 DAY SATISFACTION GUARANTEED. ALL RETURNS ARE SUBJECT TO APPROVAL. 15% RESTOCKING FEE. ADD $3.00 PER BOX FOR HANDLING PLUS SHIPPING CHARGES. COD, $4.00 PER BOX. PRICES AND AVAILABILITY SUBJECT TO CHANGE WITHOUT NOTICE. NOT RESPONSIBLE FOR TYPOS. PRE-APPROVED CORPORATE/GOVERNMENT/ACADEMIC INSTITUTION P.O.

VISA P.O.# MasterCard 2% Cash Discount

SALES 1(800) V88-4828

519 Montague Expwy., Milpitas, CA 95035
TEL: (408) 945-1668 • FAX: (408) 945-1660
EMAIL: v88@ix.netcom.com or Sales At: sales@v88.com



sufficient to keep works of the greatest literary merit out of the United States; to prevent their importation, publication, or even copyrighting. James Joyce's novel *Ulysses*, for example, was subject to "seizure, forfeiture and confiscation and destruction" because of a "decree of libel of confiscation" brought by the United States. That's right: book burning, legally sanctioned by the US government. On 6 December 1933, Judge John M. Woolsey of the Southern District of New York ruled that the book was not pornographic; but it took a District Court decision to overrule the assumption by the government that it was.

Let's not go back to the bad old days when an unproven accusation of pornography in some part of a book was sufficient to ban it outright. Let's not make accusations of pornography or "indecency" sufficient to ban not even just a single newsgroup (like a book), or a publishing mechanism such as Usenet (similar to banning all publishers of novels), but an entire class of media (like banning the printing press). Freedom of communication is at least as important for computer networks as it is for books.

The Senator Asks:

"Are you your brother's keeper, do you just stick your head in the Manhattan sand and bemoan as 'censorship' any and all actions by others who see a societal problem, especially for our precious youth?"

It seems to us that the real question is whether the *state* is our brother's keeper, and in cases of individual morality, we think not. We also do not understand how sabotaging one of the most important communication assets we and our youth have will aid our youth.

The state does not provide operating instructions when parents have new babies (at least the last time we checked). Parents are also responsible for most of the rest of raising their children. They shouldn't have to go it alone; relatives, community, employer, society at large, and the state in certain circumstances can and should assist. But this bill is far too broad, and is not needed.

There already are information providers that edit and filter information from networks for the use of children. As more children gain access to the networks, more parents will no doubt choose to use such services. The market is already providing solutions; government intervention is not needed. Parents are also capable of deciding when their children can handle full access.

Such providers are essentially carefully controlled BBS systems: centralized and special-purpose. There are many basic and profound differences between them and the Internet, with its tens of thousands of networks and millions of computers owned by thousands of organizations and used by tens of millions of people throughout the world. This bill does not take such differences into account. In attempting to promote safe zoos it would pro-

Our **Internet** means **Business**™

More services, more value:
- ▲ Supporting businesses and individuals
- ▲ Toll-free Bay Area dial up (408, 415, 510)
- ▲ Shell, SLIP/PPP, ISDN, Frame Relay, T1
- ▲ Internet security and firewalls
- ▲ World Wide Web server co-location

Aimnet™ is your Internet partner:
- ▲ Cost/needs assessment
- ▲ Equipment advice
- ▲ Competitive prices, painless upgrades
- ▲ A commitment to customer support

ISDN

DIAL UP	DEDICATED PORT FOR LAN	
1B	1B	2B
$30/mo.	$200/mo.	$300/mo.
$150 Setup	* $400 Setup	$600 Setup

NEW for LANs: Centrex ISDN & ISDN Bidirectional on Demand

20410 Town Center Ln., Suite 290
Cupertino, California 95014
Voice: 408▲257▲0900
Fax: 408▲257▲5452
http://www.aimnet.com
info@aimnet.com

E-mail, World Wide Web, and more: $20/mo.
No Busy Signals, 28.8 Support, Free Personal Web Space

408-257-0900 ext 42
* TELCO AND EQUIPMENT CHARGES EXTRA

AIMnet
CORPORATION

MATPLAN, *the* Computational Database

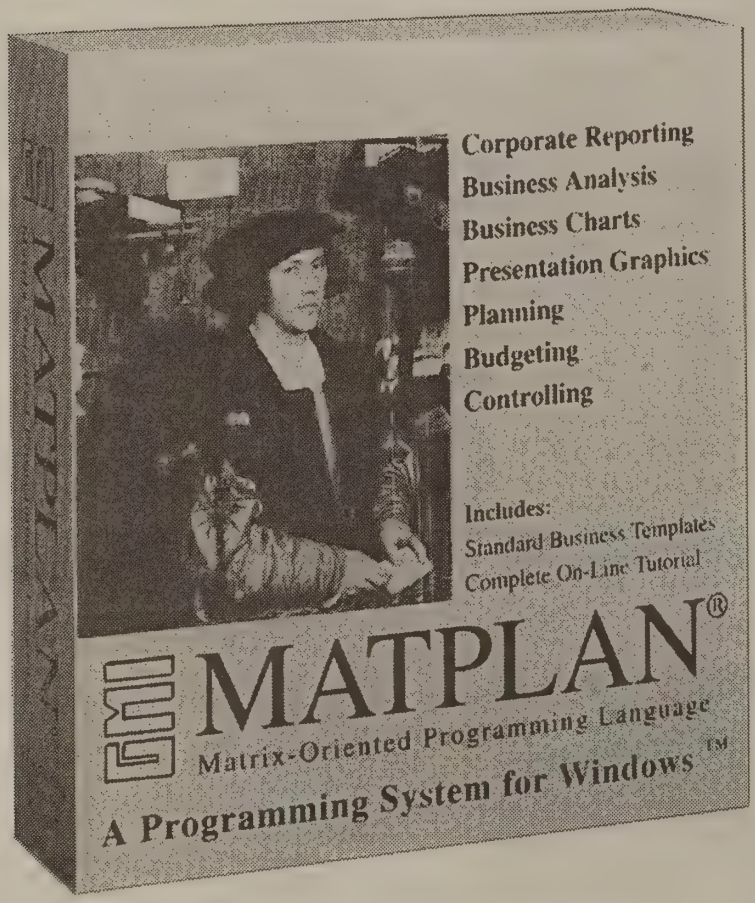
Next meeting of the MATPLAN Windows SIG:

Thursday, May 18, 1995 - 6:00 P.M.

Holiday Inn, 625 El Camino Real, Palo Alto

"Complex Spreadsheets That Work: Using the Power of a Computational Database"

Speaker: Thomas Halfaker, President of Applied Management Solutions


Corporate Reporting
Business Analysis
Business Charts
Presentation Graphics
Planning
Budgeting
Controlling
Includes:
Standard Business Templates
Complete On-Line Tutorial
GMI
MATPLAN®
Matrix-Oriented Programming Language
A Programming System for Windows™

Major organizations like banks, insurance firms, chemical companies, food distributors, airlines, computer manufacturers and many more have used MATPLAN for their corporate planning, budgeting and reporting for business analysis and statistics.

MATPLAN has an arithmetic interface with your Lotus 1-2-3, Quattro Pro and Excel spreadsheets and an ODBC connection for all relational databases like Oracle, Informix and Microsoft Access.

For more information call GMI today at TEL: (415) 855-9484

MATPLAN is available for WINDOWS, OS/2® and UNIX®, server versions for various UNIX systems and for IBM® mainframes with MVS and DOS/VSE.

GMI

GMI Inc. • 825 San Antonio Road • Suite 208 • Palo Alto, CA • 94303
Tel: (415) 855-9484 • Fax: (415) 855-9485

MATPLAN is a registered trademark of GMI Inc. Windows is a trademark of Microsoft Corporation. IBM and OS/2 are registered trademarks of International Business Machines Corporation.
All other registered and unregistered trademarks are the sole property of their respective owners. ©1995 GMI Inc.

hibit rain forests. In attempting to provide unnecessary protections for children, this bill would deny both children and adults far greater benefits.

Where This Stands

S. 314 has been accepted by the Senate Commerce Committee and on 23 March 1995 on a voice vote of 17 to 2 was ordered reported to the full Senate as part of the "Telecommunications Competition and Deregulations Act of 1995."

That larger Act is complex, has been in process for a long time, is unlikely to be derailed, and may well have beneficial provisions in it. It is not the larger bill to which we object (at this time); it is to the specific provisions added by the amendment S. 314. The committee apparently amended the amendment to make it slightly less broad, but it still contains the basic problem of making telecommunications providers liable for traffic they do not generate. S. 314 is simply a bad idea, and diluting it doesn't make it a good idea.

Senator Exon, in his letter to the editor, also says:

I offer you the same invitation I have offered others. If you do not like my recipe for correction, come, let us reason together.

We recommend that everyone concerned about S. 314 and the issues it represents please take Senator Exon up on his offer. Write him. Please be polite, specific, informative, and brief.

His address is:

Senator J. James Exon, Neb.
SH-528 Hart Senate Office Building
Washington, DC 20510-2702
(202)224-4224 (phone)
(202)224-5213 (fax)

He does not have an electronic mail address, although many other Congress members do. For example, the cosponsor of S. 314 is Senator Slade Gorton, Wash., *senator_gorton@gorton.senate.gov* .

Write your Senator or Representative (if there is not a House version of S. 314, there will be soon). They work for you; you elect them; you pay their salary. Senator Exon has decided to retire, but others will be up for re-election. See the URL already cited for how to reach them, and for pointers to the numerous groups that oppose this bill.

Votes aren't really the issue, though. This appears to be a problem of education. Congress needs to know that the public considers the Matrix and the Internet to be inherently different from telephones, and too valuable for even well-meaning governmental restrictions.

Finally, don't assume this bill is the last you will hear of this issue. Each US state regulates telecommunications to some extent, and if you are not in the US, you are not immune: remember Hong Kong. Computer network technology is new, and many, perhaps most, legislators do not yet understand it. Help educate them. ■

Copyright © 1995 by TIC; John S. Quarterman, Smoot Carl-Mitchell, *tic@tic.com* Texas Internet Consulting (TIC). *http://www.tic.com*, *gopher://gopher.tic.com*, *ftp://ftp.tic.com*; (512)451-6176, fax: (512)452-0127; 1106 Clayton Lane, Ste. 500W Austin, TX 78723 USA.

Personal Internet Accounts
To sign up Call (800) NET-3433

Web Browser
Gopher
FTP
E-Mail
Easy Installation
Connect up to 28.8K
Up to 5 hours online
Extra time $2/hr
All for only
$7.95 /month

Busy Signals

Internet $7.95 per month

Business Accts
No Equipment Charges
No Big Sign-up Fees
No long lead times
Your own Web Page
Auto E-Mail Robot
Immediate activation
8 Exec. Accounts
Domain Name
$249.00/month

To sign up Call (800) NET-3433
Business Internet Accounts

PROMOTE YOUR BUSINESS ON THE

INTERNET

Reach 25,000,000 New Customers!

Our One-stop Internet Business Promotion Services:

- Distinctive Home Page Design
- WWW, Gopher, and FTP Rental Sites
- Turn-key WWW and Gopher Servers
- Online Internet Advertising & Promotion

THE INTERNET ROUNDTABLE SOCIETY

consult@IRsociety.com
http://www.IRsociety.com
415-327-4386

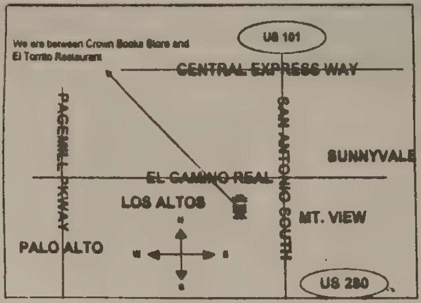
ROUND TABLE

"TOP CHOICE, BEST VALUE" SUPER PENTIUM™ SYSTEMS...

IQ LOOK!

INFOQUEST
COMPUTER

"Visit Today to See Our Various DEMO SYSTEMS"



IQ INFOQUEST
4500 El Camino Real
Los Altos, CA 94022

Tel: (415) 917-9180
Fax:(415) 917-9183
Hours: Mon-Fri 9-7
Sat-Sun 11-5

IQ Level-5 PCI/SCSI

PROFESSIONAL PENTIUM

- **Intel PENTIUM 90Mhz Processor**
- 256K Cache, 8MB RAM 72-pin
- 1.44Mb Floppy Drives
- **730MB SCSI-II Hard Drive**
- **NCR PCI/Fast SCSI-II Controller**
- 2-Serial, 1-Parallel (16650 UART)
- **Diamond Stealth 64 PCI 2MB**
- **NEC XV15 15" 1280X1024 SVGA**
- MID Tower Case, 230 Watts PS
- 101 Keytronic-2000 Keyboard
- Microsoft Serial Mouse
- Free Mouse Pad
- Pentium 90 CPU Cooling Fan

Special!

$2135

Pentium100Mhz $2350

IQ Level-5 PCI/MCD

SUPER PENTIUM

- **Intel PENTIUM 100Mhz Processor**
- **256K Cache, 16MB RAM 72-pin**
- **1.44Mb Floppy Drives**
- **1.0GB Wide SCSI-II Hard Drive**
- **NCR PCI Wide SCSI-II Controller Card**
- **2-Serial, 1-Parallel (High Speed UART)**
- **ATI Graphic Pro Turbo PCI 2MB VRAM**
- **Impression 17" 1280x1024 SVGA .28**
- **TOSHIBA 4X Internal SCSI-II CD-ROM**
- **Sound Blaster 16 Stereo Sound Card**
- **MID Tower Case, 230 Watts PS**
- **120 Watts Super Speakers**
- **101 Keytronic-2000 Keyboard**
- **Microsoft Serial Mouse**
- **28.8 Internal Fax Modem**
- **Free Mouse Pad**
- **P90 CPU Cooling Fan**

$3815

IQ Level-5 PCI/MCD

MULTIMEDIA PENTIUM

- Intel PENTIUM 90Mhz Processor
- 256K Cache, 8MB RAM 72-pin
- 1.44Mb Floppy Drive
- **850MB IDE Hard Drive**
- 2-Serial, 1-Parallel (High Speed UART)
- Diamond Stealth 64 PCI 1MB
- 15" 1280x1024 SVGA NI 0.28dpi
- MID Tower Case, 230 Watts PS
- 101 Keytronic Keyboard
- Microsoft Serial Mouse
- Free Mouse Pad
- **Toshiba 4X CD-ROM**
- **Sound Blaster 16 Stereo Sound Card**
- **80Watts Super Speakers**
- **6 Popular CD Titles**
- **P90 CPU Cooling Fan**

Special!

$2180

Multimedia!

Pentium100Mhz $2390

IQ Level-4 VLB/Green

BEST BUY

- 486DX2-66Mhz VLB/Green System
- Pentium P24T Ready
- 256K Cache, 4MB RAM
- 1.44MB Floppy Drive
- 420MB IDE Hard Drive
- VLB IDE I/O Controller
- 2-Serial, 1-Parallel, 1-Game
- VLB Graphic Accelerator 1MB
- 14" 1024x768 SVGA NI/G 0.28dpi
- Mini Tower Case, 220 Watts PS
- 101 Enhanced Keyboard
- Microsoft Compatible Mouse

Special!

$935

486DX2-80.......**$960**

14.4 Internal Fax Modem....................$60
Memory upgrade per 4Mb...............$155

IQ Level-4 MCD

MULTIMEDIA

- 486 DX2-66Mhz VLB/Green System
- Pentium P24T Ready
- 256K Cache, 4MB RAM
- 1.44MB Floppy Drive
- **540MB** IDE Hard Drive
- VLB IDE I/O Controller
- 2-Serial, 1-Parallel, 1-Game
- VLB Graphic Accelerator 1MB
- 14" 1024x768 SVGA NI 0.28dpi
- Mini Tower Case, 220 Watts PS
- 101 Enhanced Keyboard
- Microsoft Compatible Mouse
- **Double Speed CD-ROM Drive**
- **Sound Blaster 16 Sound Card**
- **70Watts Speakers**
- **6 Popular CD Titles**

$1180

486DX2-80....**$1199**

IQ Level-4 PCI-MCD

486 PCI/MCD

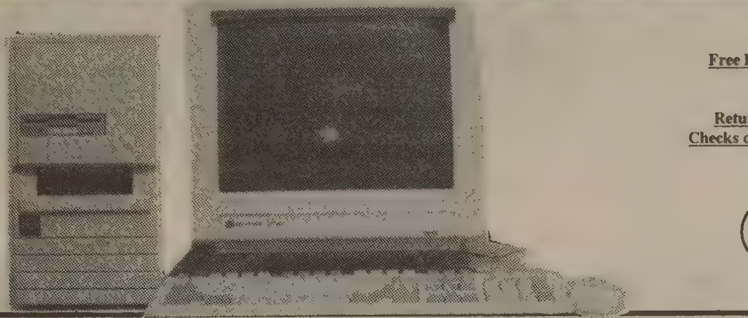
- 486DX2-66 PCI System (P24T Ready)
- 256K Cache, 4MB RAM
- 1.44MB Floppy Drive
- **540MB** IDE Hard Drive
- 32bit IDE I/O Controller, with 2S, 1P, 1G
- **PCI Graphic Accelerator 1MB**
- 14" 1024x768 SVGA NI/G 0.28dpi
- Mini Tower Case, 220 Watts PS
- 101 Keytronic Keyboard
- **Fast 4X CD-ROM Drive**
- **Sound Blaster 16 Stereo Sound Card**
- **70Watts Stereo Speakers**
- **6 Popular CD Titles**
- Microsoft Compatible Mouse

$1325

MS-DOS 6.22 & WINDOWS 3.11..... $85
Encarta '95, MS Works™, MS Money™, Dangerous Creature, CD Sampler....$85

FULLY FEATURED PENTIUM™ SYSTEMS UNDER PRICED

INFOQUEST
COMPUTER



One Year Limited Parts Warranty
Life-Time Labor and Tech Support
Labor is included in system price
Free Delivery & On-Site Service are available for Quantity purchase
Labor charge is nonrefundable
Return items are subject to 15% Restocking Fee
Checks or Credit Card not eligible for cash discount

$AVE 3% with Cash Purchase on Systems

IQ INFOQUEST
4500 El Camino Real
Los Altos, CA 94022

Tel: (415) 917-9180
Fax:(415) 917-9183
Hours: Mon-Fri 9-7
Sat-Sun 11-5

IQ Level-5 PCI/MCD

HOME PENTIUM

- Intel PENTIUM 75Mhz Processor
- 256K Cache, 8MB RAM 72-pin
- 1.44Mb Floppy Drive
- **850MB IDE Hard Drive**
- Built In Enhanced PCI /IDE I/O Controller
- 2-Serial, 1-Parallel (High Speed UART)
- **Diamond Stealth 64 PCI 2MB**
- **15" 1280x1024 SVGA NI 0.28dpi**
- MID Tower Case, 230 Watts PS
- 101 Keytronic Keyboard
- Microsoft Serial Mouse
- Free Mouse Pad
- **14.4 internal high speed fax modem**
- **Fast 4X CD-ROM**
- **Sound Blaster 16 Sound Card**
- **70Watts Super Speakers**
- **P75 CPU Cooling Fan**

Special!

$2060

Multimedia!

IQ Level-5 VLB/IDE

NEXGEN 90

- NextGen 90Mhz VLB System
- 256K Cache, **8MB RAM 72-pin**
- 1.44Mb Floppy Drives
- **850MB IDE Hard Drive**
- Built-in Enhanced PCI IDE I/O Controller
- 2-Serial, 1-Parallel, 1-Game
- **Diamond Stealth 64 VLB 2MB**
- **15" 1280x1024 SVGA NI 0.28dpi**
- **Mini Tower Case, 230 Watts PS**
- **Fast 4X CD-ROM Drive**
- **Sound Blaster 16 Stereo Sound Card**
- 70Watts Super Speakers
- 101 Keytronic Keyboard
- Microsoft Serial Mouse
- 14.4 Internal Fax Modem
- Free Mouse Pad
- P75 CPU Cooling Fan

$1985

IQ Level-5 PCI/IDE

BASIC PENTIUM

- Intel PENTIUM 75Mhz Processor
- 256K Cache, 8MB RAM 72-pin
- 1.44Mb Floppy Drive
- 540MB IDE Hard Drive
- Built In Enhanced PCI /IDE I/O Controller
- 2-Serial, 1-Parallel (High Speed UART)
- ATI Mach32 64 PCI 1MB
- 15" 1280x1024 SVGA NI 0.28dpi
- Mini Tower Case, 230 Watts PS
- 101 Keytronic Keyboard
- Microsoft Serial Mouse
- Free Mouse Pad
- P60 CPU Cooling Fan

Special!

$1600

Pentium90Mhz $1800

1. SOUND CARDS

Sound Blaster 16 Basic	$65
Sound Blaster 16 SCSI-II	$110
Sound Blaster 16 Multi-CD	$75
Sound Blaster 16 Multi-CD w ASP	Call

2. Multimedia Package

IQ DISCOVERY 2X CD 16 KIT

- **Sony 55E 2X IDE CD-ROM Drive**
- **Creative Lab Sound Blaster 16**
- **Grolier Encyclopedia**
- **MS-Golf, MS-Dangerous Cretures**
- **Sport Collection, CD Sampler**

$230

IQ DISCOVERY 4X CD 16 KIT

- **TEAC 4X IDE CD-ROM Drive**
- **Creative Lab Sound Blaster 16 MCD**
- **70 Watts Super Speakers**
- **MS-Encarta 95, MS-Works & Money**
- **MS-Dangerous Creatures, MS-Golf**
- **CD Sampler, MS-Scenes Sports Collection**

$335

3. CD-ROM DRIVES

SONY 55E (2X IDE CD-ROM)	
250ms, 300KB/sec Data Transfer	
Photo CD Compatible, Double Speed	**$115**
MITSUMI (4X IDE CD-ROM)	
230ms 600KB/sec Data Transfer	
Photo CD Compatible, Quad Speed	**$185**
TEAC (4X AT-BUS)	
195ms, 600KB/sec Data Transfer	
Photo CD Compatible, Quad Speed	**$185**
SONY 55S (2X SCSI CD-ROM)	
250ms, 300KB/sec Data Transfer	
Photo CD Compatible, Double Speed	**$180**
TOSHIBA 4X IDE	
150ms, 600KB/sec Data Transfer, 256K Cache	
Photo CD Compatible,	**$215**
TOSHIBA XM-3501B (4X-SCSI)	
150ms, 600KB/sec Data Transfer, 256K Cache	
Photo CD Compatible, Caddy	**$315int/$415ext**

4. HARD DRIVES

CONNER	
IDE 420Mb, 12ms, CFS420A	**$170**
540Mb, 12ms, CFA540A	$190
SCSI 1.0Gb, 9ms, CFP1060S	**$455int/$555ext**
2.1Gb, 9ms, CFP2105S	**$910int/$1010ext**
WESTERN DIGITAL	
IDE 420Mb, 13ms, WD2420	$185
540Mb, 12ms, WD2540	$210
1.08Gb, 10ms, WD3100	$380
QUANTUM	
IDE 540Mb, 128K, MV540AT	$195
730Mb, 11ms LT730AT	$240
SCSI 540Mb, 128K, MV540S	$220
540Mb, 11ms LT540S	$235
730Mb, 11ms LT730S	$270
1.0Gb, 10ms, 512K, PD1080S	**$505int/$605ext**
2.1Gb, 10ms, 512K, PD2100S	**$915int/$1015ext**
FUJITSU	
SCSI 1.2Gb 9.5ms M2694ESA	$499
1.2Gb 9.5ms M2694EQA (Wide SCSI)	$575

5. CONTROLLERS

PCI/VLB/SCSI	
Adaptec 2842 VLB SCSI-II	$199
Adaptec 2940 PCI/SCSI-II	$199
Adaptec 2940W PCI/SCSI-II	$255
PCI/VLB/IDE	
Enhanced PCI IDE with Hi Speed I/O	$55
Enhanced PCI IDE with I/O	$45
Enhanced VLB IDE I/O Ctrl	$25
VLB IDE I/O Ctrl with Hi Speed 16550	$35
32bit VLB IDE I/O Ctrl	$20

6. MONITORS

MAG	
DX15F (15" 1280x1024 NI/G 0.28)	**$349**
DX17F (17" 1280x1024 NI/G 0.26)	**$635**
NOKIA	
447X (17" 1600x1280 NI 0.25)	$985
447X TCO (17" 1600x1280 NI 0.25)	$1025
SONY	
15SF (15" 1280x1024 0.25)	**Call**
17SE (17" 1600x1280 0.25)	**Call**
VIEWSONIC	
15 (15" 1280x1024 NI 0.28)	$415
17 (17" 1600x1280 NI 0.28)	$855
IMPRESSION	
IMP 7 (17" 1280x1024 0.26) NI	Call
IMP 5 (15" 1280x1024 0.28) NI	Call
IMP 3+ (14" 1024x768 0.28) NI	Call

7. VIDEO CARDS

ATI MACH32 PCI $99

PCI	
ATI GraphicPro Turbo 4Mb VRAM	**$469**
ATI GraphicPro Turbo 2Mb VRAM	**$270**
ATI GraphicPro Turbo 2Mb DRAM	**$200**
ATI UltraPro 32bit 2Mb VRAM	$245
Diamond Stealth 64 4Mb VRAM	Call
Diamond Stealth 64 2Mb VRAM	$285
Matrox Impression 2+ PCI 2Mb VRAM	$355
Orchid Kelvin 64bit PCI 1Mb	$125
VLB	
Diamond Viper 2Mb	$139
Spider B/Widow 2Mb VRAM	$165
32bit SVGA VLB 1Mb	$79

8. MOTHER BOARDS

PENTIUM 90/100	
Pentium 90/100 PCI/ISA w/IDE I/O 256K	$245
ASUS	
486 PCI/VLB/ISA IDE w/256K	$165
486 PCI/ISA SCSI+IDE+I/O w/256K	$255
486DX VLB/G (DX4 Enable)w/256K	**$99**

Call for Current CPU/RAM Princing

486 Cooling Fan	$8
Pentium 60/66/90/100 Cooloing Fan	$12

9. KEYBOARDS

101 Enhanced Keyboard	$18
101 KeyTronic 2000	$28
101 KeyTronic	Call
Focus 2001 Keyboard	$35
Focus 9000 Keyboard	$55

10. CASE w/ P.S.

Desktop, 220 watts Power Supply	Call
Mini Tower, 220 watts Power Supply	$49
Mid Tower, 230 Watts	Call
Full Tower, 250 Watts	Call

11. MOUSE

Microsoft Serial Mouse	$28
Microsoft Bus Mouse	$54
Logitech MouseMan (Bus)	$55
Logitech First Mouse (Serial)	$25
Logitech First Mouse (Bus)	$45
Z-Nix Mouse (2-buttons or 3-buttons)	$15

12. MODEMS

Online/Zoltrix 14.4 FaxModem (int)	$60
Online/Zoltix 28.8 FaxModem (int)	$145
USRobitics 14.4 (Int)	$95
USRobitics 14.4 (Ext)	$125
USRobitics 28.8 (Int)	$215

13. FLOPPY DRIVE

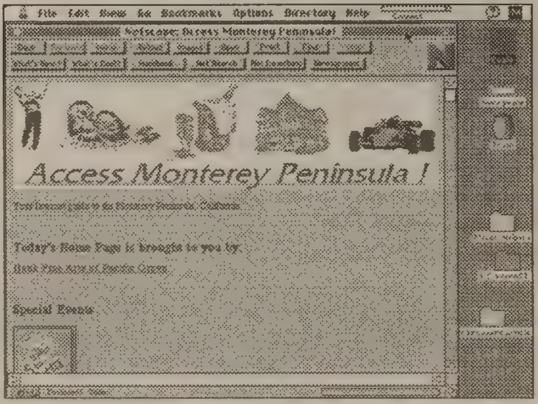
1.2 MB Mitsumi Floppy Drive	$43
1.44MB Mitsumi Floppy Drive	$36
1.44Mb & 1.2Mb Combo Floppy Drive	$99

14. TAPE BACKUP

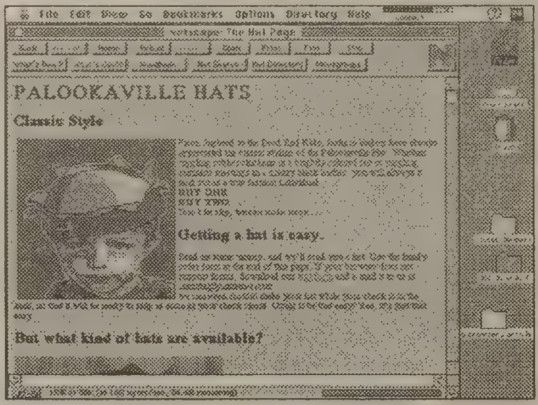
Colorado Memory System	
730Mb internal	$275
450Mb internal	$175
250Mb internal	$150
Trakker 250Mb (Ext)	$299
Conner	
Tape Stor 250Mb (int)	$145
Tape Stor 420Mb (int)	$180
Tape Stor 850Mb (int)	$285

Web Page Listings

Looking for beaches to Netsurf? Herewith we present an assortment of cool, interesting, and informative Web sites to tickle your fancy and stimulate your mind.


File Edit View Go Bookmarks Options Directory Help
Access Monterey Peninsula !
Today's Home Page is brought to you by:
Special Events

Access Monterey Peninsula!


File Edit View Go Bookmarks Options Directory Help
Netscape: The Hat Page
PALOOKAVILLE HATS
Classic Style
Getting a hat is easy.
But what kind of hats are available?

Palookaville Hats

File Edit View Go Bookmarks Options Directory Help
Netscape: sf.net
sf.net
Brought to you by cyberports
Welcome to sf.net
Digital Restaurant Guide
cyberports

sf.net

3COM CORPORATION ON THE WEB

http://www.3com.com New product and service information from 3Com, featuring information on adapters, hubs, and internetworking products. [Exp. #139.]

24-HOUR RECORDED JOB LINES FOR THE SAN FRANCISCO BAY AREA

http://www.webcom.com/~rmd/bayarea/joblines.html Listing of jobline numbers. Also, pointers to other local employment resources and online job listings. [Exp. #140.]

ACCESS MONTEREY PENINSULA!

http://www.mty.com Access Monterey! features extensive information for the Monterey Peninsula and sponsors a weekly trivia contest. [Exp. #140.]

AIMNET CORPORATION

http://www.aimnet.com Prices and services for Aimnet, an ISP for the Bay Area and Silicon Valley. [Exp. #139.]

AMERICAN BAR ASSOCIATION

http://www.abanet.org General facts and resources on the law, continuing legal education courses and requirements, ABA info. [Exp. #141.]

AMERICAN COMMUNICATIONS ASSOCIATION

http://www.uark.edu/depts/comminfo/www/ACA.html For those interested in communication research, communication law, freedom of information, free speech, First Amendment. [Exp. #141.]

AP RESEARCH

http://www.apresearch.com Market research reports and consulting services for PC cards (PCMCIA). [Exp. #141.]

ART & ARTIST NETWORK

http://voyager.via.net/netbiz/artist.html International directory of artists, art galleries, and art-related services. [Exp. #141.]

ASTROLOGY BY MOONLIGHT

http://voyager.via.net/netbiz/astrol.html Monthly personal horoscopes and astrological information. [Exp. #141.]

ASTRO-TEMP

http://voyager.via.net/netbiz/atemps.html High-paying "temp" jobs available now by astrological sign. [Exp. #141.]

THE ATHLETE'S DIARY

http://alumni.caltech.edu/~slp/tad.html The Athlete's Diary for Windows, Mac, and DOS—complete information and full-featured demo copies. [Exp. #140.]

AUSTRALIAN EMBASSY

http://www.aust.emb.nw.dc.us General background on Australia, US-Australia trade, the defense relationship, and answers to frequently asked questions. [Exp. #140.]

AZULE OF SARATOGA, FLORIST

http://www.portal.com/~jdoll/joes/azule Say it with flowers! Order direct via the Net. We ship by wire worldwide. [Exp. #139.]

BAHNWARE

http://www.bahnware.com/bahnware BahnWare develops WWW solutions for business marketing, distributed engineering, and personal use. Magellan GPS Systems WWW site. [Exp. #139.]

BAY AREA REAL ESTATE NETWORK

http://www.dnai.com/~ted An excellent resource for buyers and sellers in the Bay Area! [Exp. #140.]

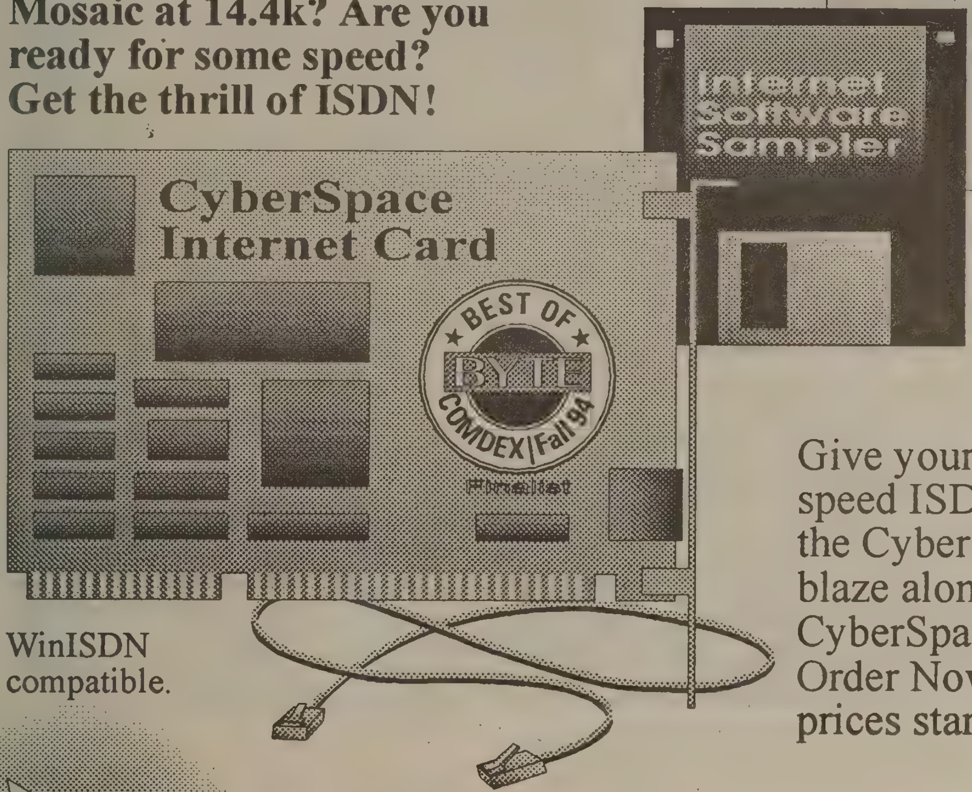
BAY AREA TRANSIT INFORMATION PROJECT

http://server.berkeley.edu/Transit/ Provides up-

Faster than a Modem!

Tired of slogging along with Mosaic at 14.4k? Are you ready for some speed? Get the thrill of ISDN!

ISDN*tek makes the finest high speed ISDN hardware. Now, for a limited time, when you buy the CyberSpace Internet card you will receive a Trial offer for Netmanage Internet Chameleon Software for ISDN and PSI's InterRamp dial-up service.


Internet Software Sampler
CyberSpace Internet Card
BEST OF BYTE COMDEX Fall '94
Finalist

WinISDN compatible.

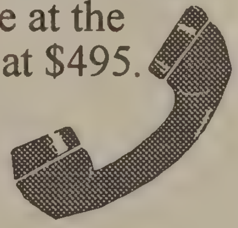
Need more info? Check our web page at **http://www.isdntek.com**

Give your Windows PC386+ high speed ISDN access at 64K bps with the CyberSpace **Internet** Card, or blaze along at 128K with the CyberSpace Internet+Plus! Order Now! Great prices start at only $395.

$395 Internet 64

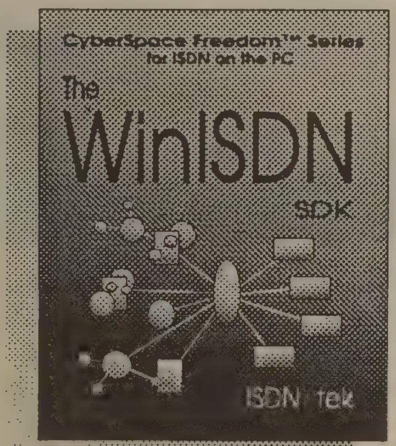
$495 Commuter

New! The CyberSpace **Commuter** Card allows you to **talk** over your ISDN line! Get 128K data rates or use 64K data with voice at the same time! Prices start at $495.



$160 NT1 ATI

Need an NT1? Don't pay TelCo prices! Get it here for only $160.


CyberSpace Freedom™ Series for ISDN on the PC
The WinISDN SDK
ISDN tek

Visual Basic Programmers! Order the $199 Software Developer's Kit! Write WinISDN applications for high speed Remote Access, File Transfer, Image Transfer, Voice capture, and more, and take advantage of fast, reliable ISDN communications!

$199 VB3 SDK

Add $8 shipping and handling.
California Residents add local sales tax.

MasterCard VISA AMERICAN EXPRESS

ISDN★tek PO Box 3000 ★ San Gregorio CA 94074
E-mail: info@isdntek.com ★ Tel: 415-712-3000 ★ Fax: 415-712-3003

to-date public transit information for the San Francisco Bay Area. [Exp. #140.]

BayNet Real Estate

http://www.baynet.com/re.html The Bay Area real estate site. Enter ads for free, search through hundreds of listings. [Exp. #141.]

Best Internet Communications, Inc.

http://www.best.com Internet service provider information. [Exp. #138.]

BizInfo Advertising And Marketing Resource Center

ftp://ftp.crl.com/users/ro/csharrow/bizinfo.html [Exp. #140.]

Black Data Processing Associates

http://www-leland.stanford.edu/group/bgsa/bdpa/bdpa.html National network of DP professionals, educators, students, and vendor reps. [Exp. #140.]

Bob Bickford's Home Page

http://www.well.com/Community/rab/index.html The still-evolving home page of Bob Bickford, Professional Wild-Eyed Visionary. [Exp. #138.]

BookNet

http://www.armory.com/~timeline/SCbooks.html Santa Cruz County bookstore catalog. [Exp. #140.]

Buzznet Magazine

http://www.hooked.net/buzznet An SF-based online cultural Web magazine capturing colorful, fresh images, words, and sounds constantly. [Exp. #141.]

The California Libertarian Party

http://www.lp.org/lp/ca/lpc.html [Exp. #138.]

Career Taxi

http://www.iquest.net/Career_Taxi/taxi.html A forum for the hottest companies to present their home pages and their employment opportunities. [Exp. #139.]

CDworld: Largest Internet Discount Music Store

http://cdworld.com Discount music store with over 100,000 major and independent label music CDs and videos. Ship worldwide. [Exp. #141.]

CGC Polar Sea

http://www.compumedia.com/~jef Extensive graphics covering last summer's expedition to North Pole and latest Deep Freeze to Antarctica. [Exp. #141.]

Clocks & Time

http://glen-ellyn.iit.edu/~clocks/clocks/clocks.html Over 200 pages: clock, watch collecting, repair, sundials, time standards: organizations, museums, publications, and software. [Exp. #140.]

The (Consumer Or Business Product And Service) Idea Factory

ftp://ftp.crl.com/users/ro/csharrow/ideas.html Bold ideas about marketing, new products or services, product improvements, clever distribution, hot promotions. [Exp. #140.]

Coolware's Place on the Internet

http://none.coolware.com/ Coolware hosts *Good Medicine* Magazine and the electronic Job Guide. [Exp. #138.]

Cool Web Page

http://www.aimnet.com/hia/pcr/home.html For thought-provoking content. [Exp. #139.]

Cryptography, PGP, And Your Privacy

http://draco.centerline.com:8080/~franl/crypto.html Links to many of the Web's resources on cryptography, PGP documentation, privacy-related Web links. [Exp. #140.]

CyberLaw™

http://www.portal.com/~cyberlaw/ Educational service on computer law for computer users published monthly, including CyberLaw™ and CyberLex™ archive. [Exp. #141.]

DCI

http://www.DCIexpo.com Get the latest information on high-tech conferences and expositions like Web World, EMail World, and more. [Exp. #140.]

Democratic Party Home Page

http://www.webcom.com/~digitals A place to find information on Democratic officials, organizations, and candidates. [Exp. #141.]

Easy Resume™

http://www.dnai.com/~lji Free resume outline and sample resume for software developers. [Exp. #140.]

eCenter

http://www.ecenter.com Putting businesses on the WWW in Virtual Trade Shows, general categories, email paging, business information. [Exp. #141.]

EDGE Home Page

http://www.well.com/www/edgehome Home page of EDGE, leading interactive entertainment publisher of *EDGE* magazine and EDGE games. [Exp. #141.]

The electronic Gourmet Guide

http://www.deltanet.com/2way/egg The eGG is the Internet's first full-color food magazine featuring interviews, articles, recipes, columns, news, and links. [Exp. #138.]

The Electronic Telegraph

http://www.telegraph.co.uk Britain's first and best online daily news source—a crossword too. [Exp. #140.]

Enterzone

http://enterzone.berkeley.edu/enterzone.html Noncorporate, professional Web zine. Enterzone is a hyperzine of writing, art, and new media. [Exp. #140.]

Enzian Theater

http://magicnet.net/enzian/ Home page of Enzian Theater, film center for Central Florida: special event info, film-related links. [Exp. #141.]

First Virtual

http://www.fv.com/access/by-seller/Internet_Info "New on the Net" report: includes all noteworthy registrations of commercial domains registered with InterNIC. [Exp. #138.]

Flash Sheridan's Newton Software

http://www.rahul.net/flasheridn/ Newton Register allows users to pay for shareware via email. Disabler is a startup manager. [Exp. #139.]

Focus on Africa

http://login.eunet.no/~presno/sample4.html Connectivity issues, sources of information about Africa for various application (news, Web, and gopher servers). [Exp. #138.]

Fountainhead Internet Systems WWW Site

http://www.earthlink.net/~fountainhead Designers of World Wide Web sites. Host of the LA Superstation. LA Advertising. [Exp. #141.]

Future New$

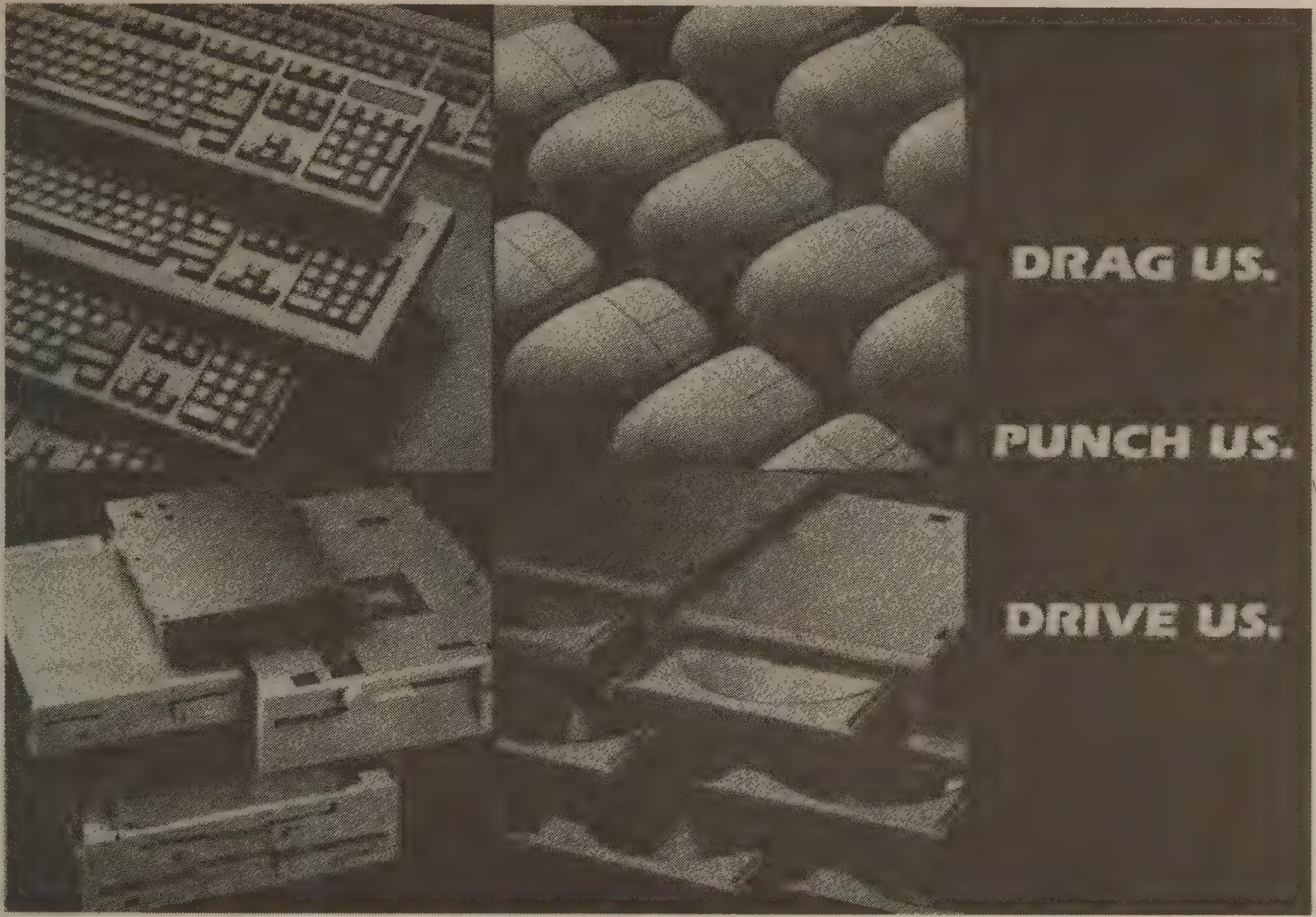
http://futurenews.com/wall-street Newsstand focused exclusively on forecasting Wall Street and global financial markets. [Exp. #138.]

The Gallery Of Advertising Parody

ftp://ftp.crl.com/users/ro/csharrow/parody.html The place to find the "ads we all love to hate" as well as parodies of these types of ads. [Exp. #140.]

Global Campus

http://www.csulb.edu/gc/ Distributed database containing new media for use in enhancing



MITSUMI

CD-ROM DRIVES

High performance and full compliance for all your multimedia applications.

CRMC-FX400 Quad Speed

- Average Access time: 250ms
- Transfer Rate: 600KB/s
- Caddyless Power Tray
- Interface: IDE

MOUSE

Ergonomically designed for maximum comfort and response.

- 2 button
- Connector: Serial or PS/2
- Microsoft Mouse Compatible
- Life:1 million clicks

BUSINESS CARD SCANNER

***New** from Mitsumi!*

The Business Card Management Solution! Reads business cards, including software that saves card information to database and retrieves information and image of card.

- Read speed: 10 seconds per card
- Built-in OCR software that locates the information quickly by any database field.
- Maximum Card size: 2.22" x 3.0"
- Unit Size: 3.5" x 5.25" x 1.625"
- MS Window. 3.1 required

FLOPPY DISK DRIVES

Superior reliabilty for both desktop and notebook computing.

Capacity	Model#	Media Size	Color
1.4MB	D359T	3.5"	Beige or white
1.2MB	D509V	5.25"	Beige or white

KEYBOARDS

101 key PC XT/AT with 5 Pin connector, tilt foot, soft tactile feel: exceeds 10 million keystrokes for years of comfortable operation.

Please Call Your Mitsumi Distributor.....

Greenleaf Distribution Inc. (408)653-0222, Fax.:(408)653-0333

4900 Patrick Henry Drive, Santa Clara, CA 95054 learning and teaching. For educational use. [Exp. #140.]

Global Communications Group

http://www.globalcom.com/global Internet consulting, training, seminars, Web page production. Ten years Internet R&D experience. [Exp. #140.]

GolfWeb

http://www.golfweb.com Complete source for everything related to golf on the WWW: results, statistics, live reporting, course information, more. [Exp. #141.]

Graffiti Wall

http://www.lh.com/cgi-bin/wall Hot tips and interesting places on the Web. Check it out or share some of the places you have found. [Exp. #140.]

Grant Tracker Home Page

http://www.rahul.net/kendric Software that keeps researchers from overspending their research grants. Download demos: DOS, Win, Mac. [Exp. #141.]

Greenpeace Climate Homepage

http://www.greenpeace.org/ Berlin Climate Summit info, FAQ on climate change, links to other climate info on the Net, more. [Exp. #141.]

Hawaii Made Easy!

http://www.aloha.com/~optunehi Learn about one of the healthiest states, and one of the safest. Many businesses and jobs. [Exp. #139.]

HOMEPAGE.HTML

http://www.hooked.net:80/users/tpitre/homepage.html Personal page for Pitre and MSRI, Inc. [Exp. #141.]

Home Pages, Inc.

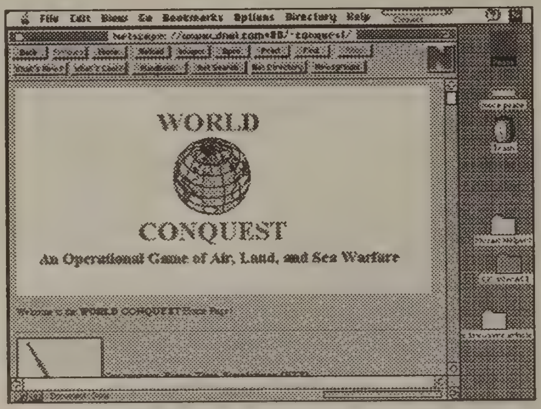
http://www.homepages.com/ A full-service WWW authoring firm and creators of the World Wide Yellow Pages™ at *http://www.yellow.com/* . [Exp. #140.]

Homes & Open Houses

http://openhouses.com Your comprehensive source for real estate information on the Internet. [Exp. #140.]

The Hong Kong Business Directory

http://FarEast.Com/HongKong/directory.html Source products, find manufacturers, locate importers and exporters, find hotels, services, suppliers, buyers, even individuals in Hong Kong. [Exp. #138.]


File Edit View Go Bookmarks Options Directory Help
WORLD
CONQUEST
An Operational Game of Air, Land, and Sea Warfare

World Conquest

Hooked

http://www.hooked.net Hooked is an Internet service provider using the amazing Internaut software. [Exp. #139.]

I-Comm: Web Surfing Without SLIP/PPP

http://www.best.com/~icomm/icomm.htm I-Comm is a full-featured graphical WWW browser which doesn't need SLIP/PPP connections. [Exp. #141.]

Imago Dei

http://www.art.net/Studios/Visual/Jaxun/homepage.html An all-digital incarnation of one computer support tech's emerging Muse... [Exp. #141.]

INDEX.HTML

http://www.manual3.com/manual3 Manual 3, Inc. is a 13-year-old technical writing firm serving the technology industry. [Exp. #140.]

IndustryNET

http://www.industry.net Keeping in touch with the computer industry. Product and service information including local suppliers. [Exp. #140.]

Infolink Information Center

http://www.infolink.net/ Fastest-growing Internet service provider in Hong Kong. See how to get connected in Hong Kong. [Exp. #139.]

INFOWERKS

http://www.best.com/infowerk/ Cool students/Web consultants page, artistic, interesting connections. [Exp. #139.]

The Institute for Global Communications Progressive Directory

http://www.igc.apc.org [Exp. #138.]

Intelligent Media

http://smartworld.com/intmedia Full-service interactive multimedia production company, service bureau. [Exp. #141.]

The Interactivist

http://199.172.178.200 A place that facilitates Internet social education and activism. Also the home of Free Burma. [Exp. #141.]

Interactivist/Go Digital Online

http://www.godigital.com Go Digital Interactive Magazine's home page: preview of CD-ROM, additional materials, subscribe, send stuff for inclusion, etc. [Exp. #141.]

Internal Revenue Service

http://www.ustreas.gov/treasury/bureaus/irs/irs.html Provides tax forms, answers to frequently asked questions, where to get more help, and where to file. [Exp. #139.]

International Netsuke Kenkyukai Society

http://www.hooked.net:80/users/yukiyama/ Information on Netsuke Kenkyukai Society and collecting netsuke (Japanese antique toggles). [Exp. #141.]

Internet Literacy Consultants

http://www.matisse.net We help people understand and use the Internet and related technologies to accomplish their goals, via seminars and consulting. [Exp. #139.]

The Internet MainStreet

http://www.mainstreet.net ISDN and leased line Internet provider for Silicon Valley. Cool eclipse photo. [Exp. #140.]

Internet Presence Providers

http://www.internex.net/ipp Providing business with complete Web site design. Focusing on real estate, art, investments, and online malls. [Exp. #140.]

Internet Roundtable Society

http://www.IRSociety.com Providers of business WWW services: home pages, promotion, etc. [Exp. #139.]

InterNex•Tiara

http://www.internex.net High-speed ISDN Internet access provider. Provide information about ISDN, access options, products, and services. [Exp. #140.]

InterNotes

http://www.tbo.com/notes.html [Exp. #138.]

IRIS Media Systems

ftp://ftp.netcom.com/pub/rl/rlai/www/home.html Home of Xantippe—The Information Structuring Workbench, a Windows hypertext/hypergraphics authoring environ-

Innovative Technology From Bold Data

BDL SERIES NOTEBOOKS

Featuring built in sound, speakers, microphone, color displays, and a full array of interfaces to the outside world, the *BDL Series* of Notebook computers from *Bold Data Systems™* are truly the most unique way to travel. Fully upgradable with a wide variety of CPU's, memory configurations and hard drives, the *BDL Series* from *Bold Data Systems™* are the answers to your complete *Multimedia On The Go Solutions,* Don't leave home without one!

- 486DX-33/DX2-66/DX4-75/DX4-100 CPU's
- 4MB/8MB Memory
- 9.4" Dual Scan Color Display
  9.5" Active Matrix Color Display
- 85/86 Key Keyboard with 2-Button Trackball
- External SVGA, Parallel, Mouse, Keyboard, Speaker, Docking Station Ports
- 2-Type I or Type II or 1-Type III PCMCIA Slots
- Bios Supported Power Management
- Fast 2-Hour Charge Time

Active Matrix Color Display

	210 MB Hard Drive	340 MB Hard Drive	540 MB Hard Drive
486DX2/66	$2430	$2475	$2620
486DX4/75	$2470	$2510	$2615
486DX4/100	$2520	$2575	$2665
Pentium 90	$3880	$3910	$4025
Pentium 100	$4000	$4030	$4145

Dual Scan Color Display

	210 MB Hard Drive	340 MB Hard Drive	540 MB Hard Drive
486DX2/66	$1850	$1880	$2000
486DX4/75	$1880	$1910	$2030
486DX4/100	$1950	$1980	$2100
Pentium 90	$2750	$2780	$2900
Pentium 100	$2900	$2925	$3050

Options

486 8-Megabyte Memory Upgrade	$155	Docking Station	$425
486 12-Megabyte Memory Upgrade	$310	14.4 PCMCIA FAX Modem	$115
Pentium-90/100 16MB Memory Upgrade	$330		

Call 1-800-923-BOLD Fax:510-490-9428

BOLData™
SYSTEMS

Prices subject to change without notice. © 1995. BOLD DATA SYSTEMS. Intel & Intel Inside Logo are Trademarks of Intel Corporation. All other names are properties of their respective owners.

ment for HTML files. [Exp. #141.]

JAPANESE UNDERGROUND TECHNOLOGY

ftp://ftp.netcom.com/pub/ge/geoi310/homepage/a6.html [Exp. #139.]

JEFF'S HOMEPAGE—THE QUAM

http://www.emf.net/~quam Jeff's Homepage and link to the Pirate Squid Club. Lots of useless nonsense. [Exp. #141.]

JOHN PERRY'S HOME PAGE

http://www.perry.com/ I'm B1FF!!! (a film festival), The Liberal Materialists (my band), photos, poetry, and much more. [Exp. #139.]

JOW'S TRUESPACE HOME PAGE

http://csual.cs.ucla.edu/truespace Provides images, utilities, and links of interest to the Caligari trueSpace user. [Exp. #140.]

LATINOWEB

http://www.catalog.com/favision/latnoweb.htm Provides a platform for Latino organizations to make their information available to the Internet. [Exp. #141.]

THE LIBERTARIAN PARTY, AMERICA'S THIRD PARTY

http://www.lp.org/lp/ [Exp. #138.]

LINKS FROM THE UNDERGROUND

http://raptor.swarthmore.edu/jahall/ Original writings, anecdotes, and links with commentary convey a Net and world view on the Web. Coordinated craziness! [Exp. #140.]

THE MAIL ORDER CATALOG RESOURCE CENTER

ftp://ftp.crl.com/users/ro/csharrow/catalog1.html Comprehensive listing of US companies doing business via mail order catalog. [Exp. #140.]

MAKIN' WAVES STUDIO

http://cyberzine.org/html/Waves/wavepage.html Aussie-style humor abounds, complete with free .wav sound files for download. Commercial enquiries welcome. [Exp. #138.]

MARK HOLT'S HOME PAGE

http://www.sun.com/sunsoft/cdware/mark.html A collection of cool and unusual Web sites. [Exp. #140.]

MATCH.COM

http://www.match.com "We met on the Net!" Thanks to Match.Com, the online dating service for the '90s. [Exp. #140.]

MEXICO OUT OF BALANCE

http://www.igc.apc.org/nacla/mexico.html Hard-to-find, in-depth information and analysis concerning political, economic, labor, and trade issues in Mexico. [Exp. #138.]

MIDNIGHT SPECIAL BOOKSTORE HOME PAGE

http://msbooks.com/msbooks Midnight Special's motto is taken from Bertolt Brecht: "Hungry man, reach for the book: it is a weapon." [Exp. #141.]

MINOR LEAGUES, MAJOR DREAMS

http://www.deltanet.com/minorleagues Minor league baseball, hockey, arena football, Indy 500 sports apparel retail sales. [Exp. #140.]

MODULUS GRAPHITE

http://www.dnai.com/~modulus Catalog of high-end basses and guitars. [Exp. #138.]

BUILD YOUR OWN WEB PAGES

USING MICROSOFT® WORD FOR WINDOWS

WebWizard™ from NICE Technologies

If you want to create your own World-Wide Web pages but have felt overwhelmed by the process, then WebWizard is for you. WebWizard lets you create Web pages using a tool you're already familiar with—your word processor.

Mac version coming soon!

Only $79

*Free shipping if you order using this form**

Here's what the experts have to say:

"NICE Technologies' Word for Windows add-on...has a simple yet well-designed toolbar that will help you build error-free HTML Level-2 compliant documents."
PC Magazine, February 1995

Clip and fax your completed order form to 1-800-421-7007

NICE Technologies, Inc.
2121 41st Avenue, Suite 303
Capitola, CA 95010
408/476-7850
nicetech@netcom.com
http://www.nicetech.com

* Offer expires May 19, 1995.

PLEASE SEND ____ WEBWIZARDS FOR $79 EACH (single-user license) TOTAL = ____________ (plus sales tax)

Company		Credit Card Type:
Contact	Phone	Credit Card #
Address	Email	Exp. Date
City, State, Zip	Fax	Signature

Web Page Listings *continued...*

MOTORCYCLE ONLINE
http://motorcycle.com/motorcycle.html Anything and everything to do with motorcycles. [Exp. #139.]

NAPA VALLEY PC USERS GROUP
http://community.net/~stevefc/index.html The home page for the Napa Valley PC Users Group. [Exp. #141.]

NETBIZ
http://204.188.129.2/netbiz/netbiz.html or *http://voyager.via.net/netbiz/netbiz.html* Your advertising gateway to the Internet. Home pages and online advertising worldwide. [Exp. #140.]

NETSURFER DIGEST HOME PAGE
http://www.netsurf.com/nsd Netsurfer Digest is a free email-delivered e-zine bringing cyberspace directly to your mailbox. [Exp. #140.]

NETWORK WORLD
http://voyager.via.net/netbiz/network.html The international directory of MLM and network marketing opportunities. [Exp. #141.]

NEW WAVE CULTURE PLAZA INC.
http://www.rahul.net/newwave/newwave.html A mail order company dedicated to Chinese culture. Chinese CDs, LDs, CD-ROMs... [Exp. #140.]

NORTHERN CALIFORNIA GUIDE TO MINOR LEAGUE BASEBALL
http://www.webcom.com/~rmd/baseball/minor-league.html Schedules, directions, ticket info, etc. for San Jose and Stockton. Coming soon: Modesto, Salinas, Sonoma. [Exp. #140.]

THE NORTH POLE
http://northpole.net Browse the North Pole; read messages from Santa, his elves, the reindeer; North Pole weather reports. [Exp. #138.]

THE OMEGA TRANSMISSIONS—A TECHNO-THRILLER
http://one.mind.net/omega/index.html An action-packed adventure about NASA's SETI project (Search for Extraterrestrial Intelligence). [Exp. #140.]

THE ONLINE WORLD MONITOR
http://login.eunet.no/~presno/monitor.html A free, bimonthly online product for supporters of The Online World resources handbook; subscriptions available. [Exp. #141.]

OPEN BOOK
http://futon.sfsu.edu/%7etalon Open Book presents "Women's Journals," an interactive piece that was created exclusively for the Web. [Exp. #141.]

OPENMARKET
http://directory.net/netinfo "New on the Net" report: includes all noteworthy registrations of commercial domains registered with InterNIC. [Exp. #138.]

PALOOKAVILLE HATS
http://www.primenet.com/~hanibal/hat.html Cool hats for the Global Village Idiot in all of us. [Exp. #141.]

PATRICK SALSBURY'S HOME PAGE
http://www.visionware.com/pat.html 110+

It's About Time

Finally...Affordable Fax-On-Demand

Robofax-Lite One Line System

$695.00 SHIPPING INCLUDED
ADD APPLICABLE TAXES

- How much time are you wasting faxing the same material again and again?
- Let Robofax™ do the job for you.
Robofax is user-friendly. No training or programming knowledge is needed.
- Robofax provides the most requested features at a price that puts fax-on-demand within the reach of any company.

WHAT IS ROBOFAX?
Robofax is a dedicated PC-based system that automatically faxes back documents in reponse to your customer's request...freeing you up to do what you do best.

Call our 24-hour demo-line: (408) 477-0770
Ask about our Robofax-PRO One to Four Line(s) System

For more information, contact the authorized IBEX, Robofax dealer below:

PaperImage℠, Inc.
2121 41st Avenue, Suite 301
Capitola, CA 95010

Sales: (408) 477 0300
Fax: (408) 477 0303
Offer expires 5/31/95

DISCOVER THE
INTERNET

NOW ONLY $17.50 PER MONTH

Unlimited access with no hourly connect fees!
Why pay long distance phone charges?

CRL brings the Internet to you with a local call from any of the following areas:

Alameda
Belmont
Berkeley
Campbell
Concord
Crockett
Emeryvillie
Corte Madera
Fairfax
Hercules
Ignacio
Kentfield
Los Altos
Menlo Park
Millbrae
Mill Valley
Mountain View
Novato
Oakland
Orinda
Pacifica
Palo Alto
Petaluma
Pinole
Redwood City
Richmond
Rohnert Park
San Carlos
San Francisco
San Jose (1,2)
San Mateo
San Rafael
Santa Rosa
Saratoga
Sausalito
Sebastopol
Sonoma
Sunnyvale
Tiburon
Vallejo

CRL provides local Internet access to over 500 cities nationwide

A CRL personal account gives you unlimited access to E-Mail, Usenet News, FTP, Telnet IRC, WAIS, Archie, Gopher, CRL's vast local archive of PC, Mac and UNIX software, plus 24 hour customer support for only $17.50 a month. There are no hourly connect or usage charges, so stay on as long as you like!

To receive additional information use the dialup below (login:guest) or contact CRL for your dedicated line, dialup, or custom IP service needs.

For free information call:
Voice: 415-837-5300
DIALUP: 415-705-6060
E-MAIL: info@crl.com
Personal account paid by Visa/M.C. $19.50 Init. Fee

CRL
WORLDWIDE NETWORK CONNECTIVITY

T1+28.8K+Sparc20
KudoNet
INTERNET
ONLY $15.00 /month

- *Want to run Mosaic/Netscape at home?*
- *Want to have your own home page on the Internet?*
- Full Internet Services: E-mail, WWW, NetNews, IRC, etc.
- FLAT Rate: No Connect-time charges.
- The FASTEST modems: 28.8kbps V.34/V.FC.
- For FREE trial/Sign up: login as "guest", password:"guest".

• Shell Account:	$15.00
• PPP/SLIP+Shell account:	$29.00
• Connect-time charge:	$0.00
• VISA/MASTER Accepted	

*plus a one time setup fee of $20 for shell account, $30 for PPP/SLIP account.

Local Access Numbers

Sunnyvale:	408-245-4590
San Jose:	408-559-8618
Fremont:	510-657-9480

* trademarks are registered to their respective company.

KudoNet
KudoNet On-Line Services
http://www.kudonet.com
Pager: 408-231-9711
Info: info@kudonet.com

Web Page Listings *continued...*

starting points for exploring the Web, HTML URLs, and me on a rock. :-) [Exp. #140.]

PHOENIXWEB

http://www.ptltd.com BIOS, plug and play SW, PCMCIA SW, Eclipse SW for desktop, portable, and hand-held PCs. [Exp. #140.]

QUOTECOM

http://www.quote.com/ Stock quotes, business news, financial market data for investors. [Exp. #139.]

RANDY KSAR'S HOME PAGE

http://www.mvhs.edu/~rksar Gives links and documents to those in need of a quick overview of the Web. Also offers Web services. [Exp. #138.]

RESUMES ONLINE

http://voyager.via.net/netbiz/resumes.html The place for job seekers to tell the world market of their availability. [Exp. #141.]

ROCK AROUND THE WORLD™

http://www.ratw.com Rock Around the World™ radio shows and newspapers: music, interviews, news—the '70s through today. [Exp. #141.]

RTFM WORLD

http://www.dnai.com/~cthomas/rtfm RTFM is an occasional rock 'n' roll band of Sybase tech support people. [Exp. #140.]

SAN FRANCISCO BAY AREA AND BEYOND

http://www.hyperion.com/ba/sfbay.html Pointers to local attractions, entertainment, community services, employment, newspapers, sports, dining, and more. Updated weekly. [Exp. #140.]

THE SAN FRANCISCO NETWORK

http://www.SF.net Growing collection of Bay Area databases and newsletters including restaurants, wineries, entertainment, and commercial locations. [Exp. #138.]

SAN JOSE SYMPHONY HOME PORT

http://webcom.com/~sjsympho/ Meet Maestro Leonid Grin and the 89 musicians of the San Jose Symphony. [Exp. #139.]

SAN MATEO TIMES

http://www.baynet.com/smtimes/index.html San Mateo County's only daily newspaper. [Exp. #139.]

THE SEAMLESS WEBSITE™

http://tsw.ingress.com/tsw/ Advertisements for law firms and legal services providers; law review articles and other legal information. [Exp. #140.]

SEGA WEB

http://www.segaoa.com Product information and graphics from the interactive king. Contests for prizes. [Exp. #140.]

SEMINARS IN USABLE DESIGN

http://www.info-design.com/usable.design Seminars in online information design, UI design, and usability testing. Leaders include William Horton. [Exp. #141.]

SENSATIONAL SEMINARS

http://www.onramp.net/sensational Sensational Seminars, Inc. "We Make Education An Experience." [Exp. #139.]

Lifetime Labor Warranty, One Year Parts On All Computers!

IBM 486

MultiMedia VESA VLB System

- 4MB RAM expandable
- IDE 2X Speed CD-ROM
- 16Bit Sound Card
- 420MB Hard Drive
- 1.44 Floppy Drive
- 14" SVGA Monitor (1024x768)
- Windows Accelerator 32-bit SVGA Card
- IDE/IO, 2S, 1P, 1G, VLB
- Mini Tower Case w/230W PS
- 101 Keyboard

$906

486SX-33 Intel, 256K, VLB	$928
486DX2-50, 256K, VLB	$1003
486DX2-66, 256K, VLB	$1003
486DX2-80, 256K, VLB	$1003
486DX4-100, 256K, VLB	$1060

Pentium PCI

MultiMedia System

- Intel Pentium 90MHz CPU
- Flash Bios
- 8MB exp. to 128MB (72-pin)
- 540MB Hard Drive
- Diamond Stealth 64 PCI Video w/2MB
- IDE/IO Controller
- Quad Speed CD-ROM
- Sound Blaster 16
- 15 SVGA 15" Monitor
- 1.44MB Floppy Drive
- 101 Keyboard
- Microsoft Mouse
- 14.4 Fax/Modem
- Mini-Tower Case 90MHz

$1966

P5-60 MHz	$1628
P5-66 MHz	$1729
P5-100 MHz	$2067

IBM 486-66, 64K

- IBM 486SLC w/Math Co.
- 2 VESA Local Bus Board
- AMI Bios 64K Cache exp to 128K
- 4MB RAM 70ns
- 1.44 MB Floppy Drive
- VLB IDE Controller 2/FD/2HD Controller
- 270MB IDE Hard Drive
- AT I/O 2S/1P/1G
- Enhanced 101 Keyboard
- SVGA Card w/512K
- Mini Tower Case w/230W PS

$519

IBM 486BL-75MHz/Math Co	$640

486PRO PCI

- 486DX2-66 CPU w/Fan
- 486 60/66 Motherboard/Zif/256K
- AMI BIOS, Intel Chips
- 8 MB, 72 Pin RAM, 70ns
- 32 Bit VLB IDE Controller
- 1.44 MB Floppy Drive
- 420MB IDE Hard Drive
- Mitsumi 101 Keyboard
- SVGA Card w/1MB
- Medium Tower Case w/230W PS

$836

486DX2-50 MHz	$836
486DX2-80 MHz	$860
486DX4-100 MHz	$904

CABLES

6' DB9 M to F	$3
6' DB9 M to M	3
6' DB15 M to F	4
6' DB15 M to M	4
6' Keyboard M to F	3
6' Keyboard M to M	3
6' Parallel printer	3
12' Parallel printer	8
25' DB25 M-F	17
6' Ext SCSI 50M-50M	15
SCSI Cable up to 7 connector	15
Y power spliter	1.5

DATA SWITCH

AB (2 way DB25) manual printer	$5.50
ABCD (4 way DB25) M Printer	10
ABCD (4 way) VGA+Keyboard	25
2:1 Automatic parallel switch	10
4:1 Automatic parallel switch	25
8:1 Automatic parallel switch	85

MOTHERBOARD W/O CPU

VLB 486 w/256K (30 & 72 Pin) ZIF	$85
Opti VLB 486 w/256K (30 & 72 Pin) Zif	95
PCI & VLB 486 w/256K (30 & 72 Pin)	105
SIS P5-75/90/100MHz w/256K	158

MEMORY

1x9-70ns, 3 chips or 9 chips	$36.95/$29.95
4x9-70ns, 3 chips	118.95
4x9-70ns, 9 chips	139.95
1x36-70ns, 72-pin, 4MB	144.95
2x36-70ns, 72-pin, 8MB	315.95
4x32-70ns, 72 pin, 16MB	435.95
4x36-70ns, 72-pin, 16MB	465.95
8x36-70ns, 72-pin, 32MB	895.95

CPU'S

AMD	
AMD 486DX2-66MHz, 3V	$120
AMD 486DX2-66MHz, 5V	158
AMD 486DX2-80MHz, 3V	135
AMD 486DX4-100MHz, 3V	188
Intel	
Intel 486DX-33MHz	$128
Intel 486DX2-66MHz	144
Intel 486DX4-100MHz	250
Pentium	
Intel P5-75MHz, 3V	$323
Intel P5-90MHz, New Version, 3V	527
Intel P5-100MHz, 3V	700

CASE & POWER SUPPLY

Mini Tower Case w/230W PS	$32
Desktop Case w/230W PS	39
Mid Tower Case w/230W PS	50
Full Tower Case w/250W PS	62
Black Color Towers	CALL

FLOPPY DRIVE

1.44 MB/1.2MB Mitsumi	$26/38
1.44 MB Teac	28
1.2 MB Teac	40
1.44MB Teac, Black	38
1.2 MB Teac, Black	48
1.2MB & 1.44MB Combo Teac	88

MOUSE / SCANNER

3-Button Microsoft Compatible	$6
Logitech	
First Mouse	$25
Trackman	72
Microsoft	
Microsoft Mouse Serial w/system	$20

CONTROLLERS

I/O 2S/1P/1G	$11
IDE 2FD/2HD W/2S/1P/1G	9
PCI IDE WI/O	34
VLB IDE WI/O Enhanced	15
Enhanced I/O, 2S/1P, w/16550 UART Chip	24
IDE I/O, 2S/1P w/16550 UART Chip	24
VLB IDE I/O, 2S/1P w/16550 UART Chip	34
Adaptec	
1522 /1542CP SCSI	$68/164
1542CFK w/Kit SCSI	226
2742T EISA Twin SCSI	228
2842 VLB SCSI	196
2940 PCI	192
2940W, wide SCSI	256
Bus Logic 445S VLM SCSI	190
DTC 2290 EISA IDE	108
DTC 2280 ISA IDE	14
DTC 2278 VLB IDE	24
Promise DC-200 IDE Cache Controller	84
Promise DC-4200 VLB w/512K Cache	96
Promise DC-2300 Plus VLB IDE Fast I/O	47
Promise DC-4030 VLB IDE Cache Controller	94
Promise DC-5030 PCI IDE 0-166NB Cache	130

HARD DRIVES

270MB 15ms IDE	$141
420MB 14ms IDE	152
540MB 14ms IDE	169
850MB 12ms IDE	235
1.0GB 10ms IDE	315
1.2GB 10ms IDE	350
540MB 12ms SCSI	214
1.0GB 13ms /2.0GB 13ms SCSI	489/824

KEYBOARDS

101 Enhanced Keyboard	$13
Focus	
101-Key Click	$28
Keytronics 101-Enhanced	22
Mitsumi 101-Enhanced	13
Maxiswitch 101-Enhanced	19
Russian 101 Keyboard	22

TAPE BACKUPS

Conner	
420MB Int	$158 (W/Tape 164)
850MB Int	260
Colorado	
DJ-20 250MB/DJ-35 350MB Internal	$130/158
DJ-25 700MB Internal	260
Tape QIC-80 3M DC2120	12
JT-20 Trakker 250MB Ext	260
JT-35C Trakker 350MB Ext	314

VGA CARDS

VGA 256K/512K	$23/33
SVGA 1MB 1024x768, 16 Bit	55
Trident /s3-805 VLB w/1MB	65/65
Trident PCI w/1MB	72
ATI	
Wonder PCI/VLB 1MB DRAM	$94
Ultra Plus PCI/VLB/ISA 2MB DRAM	158
Ultra Pro PCI 2MB VRAM, Mach 32	212
Ultra Pro VLB 2MB VRAM, Mach 32	208
Ultra Pro EISA 2MB VRAM, Mach 32	250
WinBoost PCI/VLB 1MB DRAM, Mach 64	138
WinBoost PCI/VLB 2MB DRAM, Mach 64	175
WinTurbo 64 PCI/VLB 2MB VRAM, Mach 64	254
WinTurbo 64 PCI/VLB 4MB VRAM, Mach 64	444
Diamond	
Speed Star SE PCI/VLB 11MB DRAM	$90
Speed Star SE PCI /VLB 2MB DRVAM	138
Stealth 64 PCI/VLB 1MB DRAM	112/120
Stealth 64 PCI/VLB 2MB DRAM	154/156
Stealth 64 PCI 4MB VRAM	388
Stealth 64 VLB 4MB VRAM	396
Viper 2MB VLB	242
Viper 2MB PCI	242
Genoa	
8500 VLB 1MB	$85
Orchid	
Fahrenheit 64 PCI/VLB 1MB DRAM	$126
Fahrenheit 64 PCI/VLB 2MB DRAM	172
Fahrenheit 64 Pro PCI/VLB 2MB DRAM	268
Fahrenheit 64 Pro PCI/VLB 4MB VRAM	398
Kelvin EZ PCI/VLB 1MB DRAM	94/94
Kelvin ISA 1MB	116
Kelvin VLB 64-Bit, 1MB/2MB	116/164
Kelvin PCI 64-Bit, 1MB/2MB	116/164

MONITORS

14" Mono	$68
14" VGA Mono	83
14" Super VGA 1024x768 .39	178
14" Super VGA 1024x768 .28 Int	182
14" Super VGA 1024x768 .28 NI	206
15" Super VGA 1280x768 .28	277
17" Super VGA 1280x768 .28	560
VIEWSONIC	
6E 14" 1024x768 .28 Green	$241
15ES 15" 1024x768 .28	325
15G 15" 1280x1024 .28 60MHz	370
15 15" 1280x1024 .27 Green	400
17 17" 1600x1280 .27 Green	794
17E 17" 1280x1024 .28 Green	662
17G 17" 1280x1024 .28 Green	682
20G 20" 1600x1280 .28	1224
21PS 21" 1600x1280 .25	1592

FAX MODEM

9600 Fax/2400 Modem	$25
14.4 Fax Modem Int	44
14.4 Fax Modem Ext	64
14.4 Fax Modem w/Voice Int	50
28.8 Fax Modem (28.8 Data, 14.4 Fax) Int	90
28.8 Fax Modem (28.8 Data, 14.4 Fax) Ext	126
28.8 Fax Modem w/V.34 Int	120
28.8 Fax Modem w/V.34 Ext	140
US Robotics	
Sportster 14.4 Fax Modem Int	$90
Sportster 14.4 Fax Modem Ext	108
Sportster 28.8 Fax Modem Int	188
Sportster 28.8 Fax Modem w/V34 Int	216
Sportster 28.8 Fax Modem w/V34 Ext	236

NETWORK PRODUCTS

16 Bit Ethernet Cards Coax	$24
16 Bit Ethernet Cards 10 Base-T	25
16 Bit Ethernet Cards Combo	26
16 Bit Ethernet Cards (Pocket for Notebook)	98
3COM	
3C509 ELINK III Coax/5 Pack	$102/458
3C509 ELINK III TP/5 Pack	76/408
3C509 ELINK III Combo/5 Pack	116/488

CD-ROM/SOUND CARD

Media Magic 16-Bit	$59
Sony 55E 2X, IDE	101
Mitsumi 4X, IDE	180
Teac 55A 4X	162
Toshiba 3501B 4X SCSI-2	288
Sound Blaster Pro 16 MCD	72
Sound Blaster 16 MCD w/ASP	163
Sound Blaster Pro 16 SCSI II (OEM)	108
Sound Blaster Pro 16 SCSI II w/ASP	193
Sound Blaster AWE 32 Value Edition	228
Sound Blaster AWE 32	268
Discovery 16 CD (Retail Pak)	265
Deluxe Speakers	6
80 Watt/120 Watt Speakers	42/56

WIN WIN PACK 1

(12 Titles on 3 CDs) $32
Grolier Multimedia Encyclopedia, The Animals, The Robot Tank, Checkers, Backgammon, The Puzzle Gallery, Dian Lau, Beyond The Black Hole, Loopz, Cribbage King, Life & Death, The Chess Master 2100

EUREKA PACK

(14 Titles on 3 CDs) $35
Compton Interactive Encyclopedia, Contraption Zack, D/Generation, Epic, F29 Retaliator, Life & Death II-The Brain, Mavis Beacon Teaches Typing, Might & Magix II, Push Over Robocop 3D, The Chess Master 2100, The Chess Master 3000, US Atlas, World Atlas

EDUTAINMENT PACK

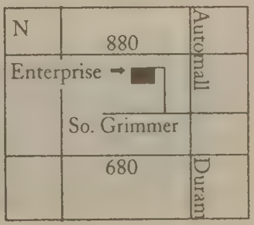
(10 Titles) $29
25 Great Games, Animal Kingdom, Digital Cinema, Discoveries of the Deep, New Kids, Edutainment #1, Swimsuits, Terminator 2, Chess Wars, The Star Child, Tropical Rainforest, Ultimate Domain

'95 WINDOW PACK

(6 Titles on 3 CDs) $30
Chessmaster 4000, Groliers Multimedia Ecy, Mavis Beacon Teaches Typing, The Animals, US Atlas, World Atlas

AMERICA COMPUTER

4450 Enterprise Street #108, Fremont, CA 94538
(510) 226-0258 Fax: (510) 226-0261
Hours: M-F 8:30-7 Sat & Sun 11-5



Not Responsible for typographical errors. Prices, term, availability subject to change without notice. Cash discount applies to currency only (not checks and credit cards). Please call for more information.

AST, COMPAQ, H.P., NOVELL
AUTHORIZED RESELLER
ONE-STOP SHOPPING SOURCE

HEWLETT PACKARD
VECTRA,
OMNIBOOK
$CALL

COMPAQ
ALL MODELS
$CALL

AST
ALL MODELS
$CALL

MEMORY
1x36, 1x32,
1x36, 4x9,
All Speeds
$CALL

NOVELL
- 3.12 5 User Upgrade........$450
- 3.12 10 User Upgrade 650
- 3.12 10 User Upgrade 1489
- 3.12 or 4.1 50 Users Full..1450

INTEL MOTHERBOARDS
- Premiere II 75/90/100 MHz ..$300
- Premiere III 100/120 MHz....345

QUANTUM HARD DRIVES
- LT540S 540MB $230
- LT730AS 730 MB 279
- XP3250 2.1 GB 925

CPUs
486, PENTIUM
All Makes All Models
$CALL

NOVELL CNE ON STAFF
CALL FOR FREE CONSULTATION

IST MULTIMEDIA SYSTEM
Intel Pentium 90 MHz System
- Mini Tower or Desktop Case
- 8 MB RAM
- 1.44 & 1.2 MB Floppy Drive
- 560 MB Floppy Drive
- Diamond Stealth PCI Video w/2 MB
- 101 Keyboard
- Double Speed CD-ROM Drive
- 16 Bit Sound Card
- Stereo Speakers
- Microsoft DOS 6.22
- Microsoft Windows 3.0
- Novell Certified & FCC B Approved

$2000

INTEL 486DX2-66 SYSTEM
- 486 Novell Certified Motherboard w/256K Cache
- Mini-Tower or Desktop Case
- 200 Watt Power Supply
- 4 MB RAM •1.44 MB Floppy Drive
- DTC 2276VL VLB IDE I/O
- Novell Certified & FCC B Approved

$625

Call For Items Not Listed

IST Inc.
3444 De La Cruz Blvd
Santa Clara, CA 95054
(408) 653-1000
Fax: (408) 988-4636
Novell Certified NetWare Engineer

Your Complete Internet and Online Resource
California Internet
A Division of Global InfoNet Inc.
$9 Monthly up to 120 hrs primetime included
Yes ... the Internet is Affordable

Full Internet Access
- Telnet (we have a T1 line)
- FTP & IRC
- Gopher, Finger, Archie
- World Wide Web
- 3500 + Newsgroups
- Internet E-Mail
- Graphical Interface Available

New Games Connection
- Online and Multiplayer Games
- Play Doom with up to 4 players
- 7,000 Games Files for Download
- Vist your favorite internet game sites

Home Buyers Network
- Bay Area Public Access MLS
- Bay Area Foreclosures

The Parapsychology Forum
Online Tarot Reading Free
Forums and News

Travel Services
- American Dream Cruises Online Cruise Only Travel Agency
- Online Specials and Bargains World Wide Cruise Intinerary online

Online Shopping Mall
- Software and Hardware
- Art, Entertainment and Fashion
- High Tech Gizmos
- Wine Online - California Cusine

Online Forums and Chat
Internet Chat
Custom Forums - Public or private
Bring your group online

IBM and MAC users welcome
12,000 shareware files for download

More Services added
Every Day

Modem San Jose (408) 374 2098
Modem S.F. (415) 391 7180
Modem Oakland (510) 596 9977
voice (510) 658 2177
Call Today!

Telnet to: California.com
Soon low speed and high speed
SLIP ACCESS.
Free Trial Access
Business Accounts as low as $12.50

Online Guide

Web Page Listings *continued...*

SHARROW ADVERTISING & MARKETING BIZINFO=A9 RESOURCE CENTER

ftp://ftp.crl.com/users/ro/csharrow/homepage.html Advertising and marketing reports and issues, mail order catalogs, ad parodies, humor and sarcasm, digital age issues and essays. [Exp. #140.]

THE SHAW FESTIVAL

http://www.cyberplex.com/CyberPlex/Arts/Shaw/Shaw.html Information about shows currently being performed by the only company that specializes in plays written during G.B. Shaw's lifetime. [Exp. #138.]

SK WRITERS HOME PAGE

http://www.skwriters.com A placement agency specializing in technical pubs, marcom, and training professionals. [Exp. #141.]

SOFAL'S PLACE

http://www.csua.berkeley.edu/~sophal Sophal's home page has many links to Cambodian-related home pages, not to mention his favorite quotations. [Exp. #140.]

SOFTWARE TECHNOLOGY SERVICE

ftp://ftp.crl.com/ftp/users/ro/sts/StsWWW/homepage.html Software and electronic analysis, design, and engineering. Specializing in unusual languages, systems, projects, and prototypes. [Exp. #140.]

THE SRMC SPIDER WEB

http://sweb.srmc.com/ Full-service ISP-WWW, 28.8, ISDN through T-1, as well as on-site support and maintenance. [Exp. #139.]

STANFORD CENTER FOR TUBERCULOSIS RESEARCH

http://molepi.stanford.edu Research at Stanford University tracking the spread of tuberculosis in San Francisco. [Exp. #140.]

STANFORD UNIVERSITY BECHTEL INTERNATIONAL CENTER

http://fugi.Stanford.edu/icenter/icenter.html Programs and services offered by I-Center for Int'l. students/scholars, families, and students who want to travel abroad. [Exp. #141.]

STARBOX GRAND CENTRAL

http://www.starbox.com/starbox/ Contact Tecnation Digital World for your own Starbox™ WWW site and inclusion in the intuitive Starbox directory. [Exp. #141.]

STAR TREK: VOYAGER

http://voyager.paramount.com Latest Web site by Paramount promotes new Star Trek show and connects studio with the fans. [Exp. #138.]

STOWE MOUNTAIN RESORT

http://www.together.com/sms/stowe Photos, weather maps, snow condition reports, press releases, lodging information, insider's guides, and special offers. [Exp. #139.]

SUPERBUSINESS NET

http://www.sbusiness.com Web pages, ftp and Internet services for business. We will be featuring secure transactions via the Web. [Exp. #140.]

SYBASE HOME PAGE

http://www.sybase.com Info on products and services; views of the San Francisco Bay by clicking on BayCam button. [Exp. #139.]

SYMMETRIC TECHNOLOGY

http://www.Symmetric.com Computer design, software development, sys-

OPTIQUEST®

ViewSonic®

News Release !

THE VALUE LINE MONITOR BY ViewSonic®

PC MAGAZINE EDITORS' CHOICE

"This Editors' Choice award-winning monitor is an excellent buy; very hard to pass up." March 15, 94

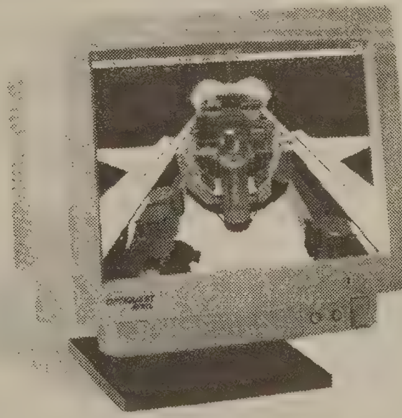
"This extra-large display and on-screen controls make the Optiquest® 4000DC a Best Buy."
PC World, April, 1994

OPTIQUEST 4000DC----- **$665**

Optiquest® award winning quality raises the standard....not the price.

NEW!

It's a 17" Trinitron®
It's Only ***$ 795***
It's from Optiquest®
4000TC (see spec.below)



Model	CRT	Dot Pitch	Max Res (Non-Int)	Refresh Rate	**MAC Compatible**	Color Matching	**PRICE**	**Warranty**
4000DC	17"	.27	1280x1024	100Hz		Yes	***$630***	**3 year**
4000TC	17"	.25	1280x1024	90Hz	Yes	Yes	***$795***	**3 year**
4500DC	17"	.28	1600x1280	100Hz	Yes	Yes	***$728***	**3 year**
2082DC	20"	.28	1600x1280	90Hz	Yes	Yes	***$1,215***	**3 year**

PC MAGAZINE EDITORS' CHOICE — March 15 1994 Optiquest 1500D
PC WORLD — April, 1994 Optiquest 4000DC
HARDWARE 200 — June, 1994 Optiquest 4000DC
CHIP TIP September 1994 — September, 1994 Optiquest 4000DC
PC WELT TESTCENTER RECOMMENDATION — October 1994 Optiquest 4000DC
PC WORLD BEST BUY — October 1994 Optiquest 2000DC
October, 1994
energy — EPA POLLUTION PREVENTER

To Order Please Call (510) 683-8800 or (FAX)683-8662

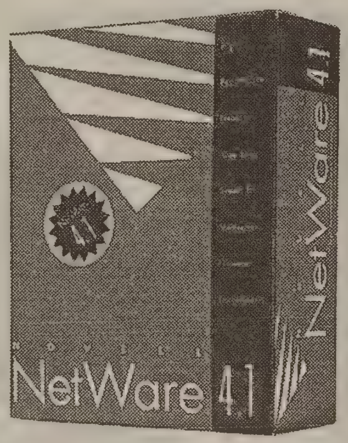
EMPaC® International, Inc.

47490 Seabridge Drive Fremont, CA 94538

NOVELL NETWARE

We Have Every Novell Item In Stock Including NetWare 4.1 New Version

NOVELL NETWORK SPECIALISTS



We Will Beat Any Advertised Price in the Bay Area!

- Novell Netware v3.12 Any User
- Novell Netware v4.1 Any User
- Unixware/Other Novell Products
- NE2000 Plus Network Adapter (Combo, Jumperless)
- LAN Starter Kits

CALL FOR BEST PRICE!

MONTHLY SPECIALS

NOVELL NETWARE v3.12-5/50 USERS $530/1920
NOVELL NETWARE v4.1-5/50 USERS $530/1920

"Serving All Of Callifornia's Networking Needs Since 1989"

VerTex Technology
298 S. Sunnyvale Ave. Suite 103
Sunnyvale CA. 94086
(408) 733-1277
Fax: (408) 733-1276

Corporate, Volume Buyers PO's Welcome Please Call About Reseller Programs

tems, and networks. [Exp. #141.]

THE TAX PROPHET

http://www.taxprophet.com The Tax Prophet deciphers the Internal Revenue Code for taxpayers and professionals alike. [Exp. #141.]

TECNATION DIGITAL WORLD

http://www.tecnation.com/tecnation/ Tecnation Digital World's online presence. Read about our innovative products and creative services. [Exp. #139.]

TELOS, THE ELECTRONIC LIBRARY OF SCIENCE

http://www.telospub.com/ TELOS publishes scientific titles with electronic components: CD-ROMs, diskettes, or files via Internet. It's cool. [Exp. #140.]

THINGS I'D LIKE TO SEE IN CYBERSPACE

http://www.clark.net/pub/journalism/wishes.html A simple home page to collect the thoughts and wishes of those using the Internet. [Exp. #139.]

THOMAS

http://thomas.loc.gov US House of Representatives: full text of all bills of 103rd Congress, email addresses, more. [Exp. #139.]

TIM HO

http://cad.ucla.edu:/~ho A serialized comic strip about a PC computer mouse. [Exp. #139.]

TRADENET

http://voyager.via.net/netbiz/tradenet.html The international directory of world trade opportunities and offerings. [Exp. #141.]

TV NET

http://tvnet.com/TVnet.html TV Net provides information on broadcast/cable TV stations throughout the US and the world. [Exp. #138.]

UC RIVERSIDE, CALIFORNIA MUSEUM OF PHOTOGRAPHY

http://cmp1.ucr.edu Historical photographs, contemporary media arts, and children's projects are at the UCR/California Museum of Photography. [Exp. #140.]

UC SANTA CRUZ EXTENSION CATALOG

http://www.ucsc.edu/unex Quarterly, UCSC Extension provides its catalog of 500 courses, as well as events and information. [Exp. #141.]

UNIFORM CAPITAL ACCESS NETWORK

http://www.ucan.com/ucan/ Offers investors and entrepreneurs the opportunity to explore business prospects. [Exp. #138.]

USAMALL

http://www.usamall.com Fun page with hot and hip info, adventure sports, and entertainment schedule for concerts in the Bay Area. [Exp. #140.]

VEGAN ACTION

http://www.umanitoba.ca/arrs/va/vegan_action.html A nonprofit group providing information on vegan, animal-free diets and lifestyles. [Exp. #139.]

VIDEOMAKER'S CAMCORDER & DESKTOP VIDEO

http://www.videomaker.com High-quality, up-to-date information on video production and distribution; to democratize and enrich television. [Exp. #141.]

VINKO KOJUNDZIC'S HOME PAGE

http://maja.zems.fer.hr/~vkojun This is a home page with nice pictures of Zagreb, and a link to our official WWW server. [Exp. #140.]

VIRTUAL VEGAS

http://www.virtualvegas.com Virtual Vegas brings fun, entertainment, contests, prizes, and more. You can virtually gamble here—stay tuned! [Exp. #141.]

VIRTUAL VINEYARDS

http://www.virtualvin.com Learn about the delights of great wine, discover your wine tastes, buy carefully selected wines. [Exp. #141.]

VISIONWARE HOME PAGE

http://www.visionware.com/ PC/UNIX connectivity products: PC X-Servers, terminal emulators, ODBC solutions, and free software demos! [Exp. #140.]

W3-DESIGN

http://www.w3-design.com Designers of World Wide Web sites. [Exp. #139.]

WALNUT CREEK CDROM

http://www.cdrom.com Publisher of over 50 CD-ROM titles and host of the busiest ftp site on the Internet. [Exp. #141.]

WALT PERKO'S HOME PAGE

http://slip.net/~wperko See pics of CD-ROMs 10,000 Sounds & Songs and MegaMODMadNess vol. 1. [Exp. #140.]

WEBCHAT

http://www.IRSociety/WebChat.html Real-time, multimedia chatting on the WWW. [Exp. #139.]

WEB COMMUNICATIONS CORP. HOME PAGE

http://www.webcom.com/ Self-service, value-added, inexpensive WWW publishing services. [Exp. #141.]

WEB WORLD

http://204.188.129.2/netbiz/webworld.html or *http://voyager.via.net/netbiz/webworld.html* The World Wide Web home page directory. Access any listed page with one mouse click. [Exp. #140.]

WEDDINGS ONLINE

http://www.sensemedia.net/sprawl/weddings A one-stop information resource making it possible to plan your wedding right from home. [Exp. #140.]

WELCOME TO WOL ON THE WEB

http://www.cris.com/WOL The home of *Windows OnLine* and the *WinOnLine Review* (online magazines) commercial and shareware reviews. [Exp. #140.]

WELLNESS ESSENTIALS

http://voyager.via.net/netbiz/weles.html The home page of wellness information and nutritional products and more. [Exp. #141.]

WHAT'S NEW IN TRAVEL

http://voyager.via.net/netbiz/travel.html The place to get "freebies," info, discounts, and hot travel deals. [Exp. #141.]

WH NETWORKS

http://www.whnet.com/wolfgang Connecting Minds, data communications archive. [Exp. #140.]

WORLD CONQUEST

http://dnai.com/~conquest Popular two- to twelve-player wargame (WWII) w/GUI (shareware), hourly turn processing. [Exp. #140.]

WRITER'S SHOWCASE

http://community.net/~necknox Tells about the author and book on disk called *Fatal Image.* [Exp. #140.]

YOU@HERE.NOW

http://www.webcom.com/~blessed Interactive philosophical site that allows you to share your contemporaneous thoughts with your fellow beings. [Exp. #140.]

ZIPZAP UNIVERSE

http://zipzap.com Home to the ZIPZAP Gallery, *Deep Style* Magazine, *ZIPZAP* e-zine, and the ZIPZAP Universe BBS. [Exp. #140.]

Lifetime Labor Warranty

72 Hour Burn-in on all systems

Intel 486 Solution
486 Vesa Local Bus
* Intel 486 CPU w/ 256K Cache
* Built-in Math Coprocessor
* 3 VLB slots
* 4 MB RAM 70-ns, 72 pin
* 1.44 Floppy Drive
* 420 MB IDE Hard Drive
* IDE Controller 2HD/2FD
* 2 Serial/ 1 Parallel/ 1 Game Ports
* Video Accelerator w/1MB RAM
* Mini Tower Case w/ 230W P.S.
* 101 Enhanced Keyboard
* 3Button Serial Mouse w/ Pad
* 14" SVGA Monitor N.I. .28 Dpi
DX-33 $978
DX2-66 $1078

intel inside

FREE** Cellular Phone With Any Purchase
CELLULARONE Quality Service
** This offer is conditional upon Subscription to a Qualifying Cellular telephone Service For a Minimum Period of [illegible] Subject to Credit approval and/or carrier deposit.

Fileserver Solution
PENTIUM 100 PCI
* Intel Pentium 100 MHZ w/ CPU Fan
* Asus Motherboard w/ 256K Cache
* 16 MB RAM 70-ns, 72 pin
* 1.44 Floppy Drive
* 1 GB SCSI Hard Drive
* NCR SCSI II Controller
* 2 High Speed Serial Ports (16550)
* 2 Parallel Ports
* M.G.P. card & Monochrome monitor
* Full Size Tower Case w/ 250W P.S.
* 101 Enhanced Keyboard
* 3 Button Serial Mouse W/ Pad
* NE-2000 Compatible combo Ethernet card
$2478

intel inside pentium

Pagers
As low as $5 /Mo.**
** with annual billing option.
* FREE Activations
* FREE Recrystalising
* FREE Custom Greeting

Laptop Solution
PATRIOT 4000
* Dual Scan Color
* Fully Modular Design
* Multimedia System (SB Compatible)
* 2 type II/1 type III PCMCIA slots
* 4 MB RAM Expandable to 32MB
* 1.44 Floppy Drive
* 344(520/710) MB IDE Hard Drive
* VLB Video w/1MB VRAM
* AC/DC Adaptor and Audio Drive
* Carrying Case

intel inside

ASK US ABOUT OUR 90 DAYS SAME AS CASH AND BUSINESS LEASING PROGRAMS!!!

	340MB	520MB	710MB
486 DX2-50 SL	$1799	$1899	$1999
486 DX2-66 SL	$1849	$1949	$2049
486 DX4-100	$1949	$2049	$2149

Other Configurations And accessories: Please Call

Workstation Solution
486 BL-75 VLB
* IBM 486BLC3-75 CPU
* MR Bios w/ 256K Cache
* Built-in Math Coprocessor
* 3 VLB slots
* 4 MB RAM 70-ns, 72 pin
* 1.44 Floppy Drive
* IDE Controller 2HD/2FD
* High Speed I/O (16550)
* SVGA Video Card w/1MB
* Mini Tower Case w/ 230W P.S.
* 101 Enhanced Keyboard
* 3 Button Serial Mouse W/ Pad
* 14" SVGA Monitor N.I. .28 Dpi
* 16 Bit Combo Ethernet Card
$769

One Year parts, Life time Labor Warranty, FREE Life time Technical Support.

Silicon Solutions
15699 Los Gatos Blvd.
Los Gatos, Ca. 95032

Phone: (408)356-4565
Fax: (408)356-2175
Email: silicons@hooked.net

VISA MasterCard

Business Hours:
Mon-Fri 9am-6pm
Saturday 10am-4pm

* All sales are final after 30 days.
* All returns subject to 15% restocking fee.
* Prices subject to change without notice.
* Corporate and Government PO's welcome.
* Not responsible for typographical errors.

Bascom, Lark Ave., 17, 85, Los Gatos Blvd., Los Gatos Almaden Rd., Blossom Hills Rd.

* Networking
* On-site Service
* Data Recovery
* Business Leasing
* FREE Estimates
* FREE installation w/ purchase of components.
* Ample Parking

Internet Literacy Consultants
We help people understand and use the Internet and related technologies to accomplish their goals.

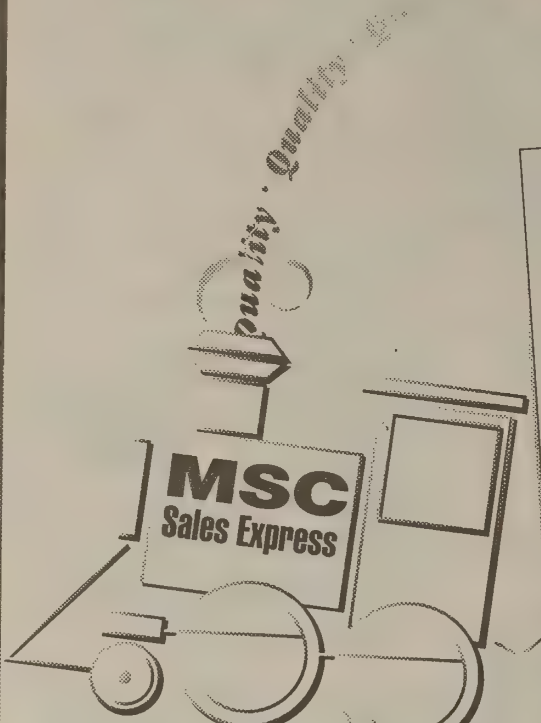
ILC Consulting Services: Our services take the form of support and planning for individual or corporate Internet access and Internet presence. Our references include Global Village, LucasArts, Moon Travel, and Whole Earth Catalog. We will "get you on the Internet", show you what you can do there, and teach you how to do it!

ILC Seminars: Low-cost, high-quality Internet seminars for beginners, the curious, and active users.

Internet 101: An Introduction and Overview for Beginners and the Curious.
Internet 303: A two part how-to class for Internet Users with SLIP/PPP accounts. 1: Get the most from your SLIP/PPP account. 2: Beginning HTML Authoring. We welcome Mark Schmick as the new presenter!
Special: Connect your PC to the Internet: Based on the book "The PC-Internet Connection". Emphasis will be on connecting PC's to the Internet using software for DOS, Windows, and Windows NT.

For dates, times, and details call:
(415) 469-8271 or e-mail info@matisse.net

Micro Service Center,



PENTIUM 100

- ASUS MotherBoard With 512K Cache
- Intel P100 Processor With Fan
- 4 PCI/4 ISA Slots
- 8MB Ram 70 NS
- Quantum 540MB IDE Hard
- Teac 1.44 Floppy Drive
- PCI Enhanced IDE Controller
- Hi-Speed IO
- Diamond Stealth 64 PCI w/1MB
- 15" SVGA .28dp, 1280x1024, N/I
- 101 Key Keytreonics Keyboard
- Medium Tower Case & 250 Watt Power Supply
- 3–Button Mouse

$1999

PENTIUM 75

- ASUS MotherBoard With 256K Cache
- P75 Processor With Fan
- 4 PCI/4 ISA Slots
- 8MB Ram 70 NS
- Quantum 540MB IDE Hard
- Teac 1.44 Floppy Drive
- PCI Enhanced IDE controller
- Hi-Speed IO
- Diamond Stealth 64 PCI w/1MB
- 15" SVGA .28dp, 1280x1024, N/I
- 101 Key Keytronics Keyboard
- Medium Tower Case & 250 Watt Power Supply
- 3–Button Mouse

$1599

486 DX4-100

- ASUS MotherBoard With 256K Cache
- AMD486DX4-100 Processor With Fan
- 4 PCI/4 ISA Slots
- 4MB Ram 70 NS
- Quantum 420MB IDE Hard
- Teac 1.44 Floppy Drive
- PCI Enhanced IDE Controller
- Hi-Speed IO
- Diamond Stealth 64 PCI w/1MB
- 14" SVGA .28dp, 1280x1024, N/I
- 101 Key Keytronics Keyboard
- Mini Tower Case & 230 Watt Power Supply
- 3–Button Mouse

$1159

Preventive Maintenance Service List:

Computers:

- Floppy drives cleaned and alignment checked.
- Boards and cables checked for contact.
- Systems are vacuumed out.
- Diagnostics are run on hard drive.
- Diagnostics are run on full systems.
- Exterior of computer, monitor and keyboard cleaned.

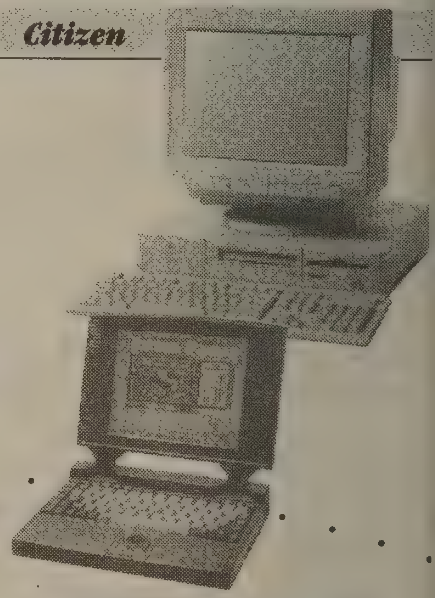
Laser Printers:

- Check pick-up & feed rollers.
- Check fuser/drum for any score marks.
- Clean charger wires.

Dot Matrix Printers:

- Printhead is checked for missing pins, cleaned & lubed
- External/Internal cleaning of all printers

NOVELL · Hewlett Packard · Powerbook · Macintosh · Clones · Citizen



MICRO
Service Center, Inc.

Computer Service, Repair & Sales

Specializing In:

Laser/Dot Matrix Printers

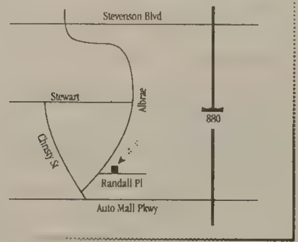
HP, NEC, Epson, Okidata, Data Products and Most Brands

Computers

IBM, Apple/Mac, Compaq, Toshiba, Laptops and Clones

- **Fast On-Site Response**
- **Corporate, Small Business & Residence**
- **Contract With 4-Hour Response & Loaners**

Corporate Headquarters



5415 Randall Place
Fremont
California 94538
510.770.0399
Fax 510.623.1802

East Bay ▾ 510.770.0399

Oakland, Berkeley, Piedmont, Alameda, Albany, San Leandro, Emeryville, Hayward, Fremont, CastroValley, Newark, San Lorenzo, Union City, Concord, Walnut Creek, Danville, Pleasant Hill, Livermore, Pleasanton, Dublin, San Ramon

Peninsula ▾ 415.342.5882

San Mateo, San Carlos, Belmont, Palo Alto, Atherton, Menlo Park, Stanford University

San Francisco ▾ 415.342.5882

Burlingame, Foster City, Millbrae, Colma, Daly City, San Bruno, South San Francisco, San Francisco Int'l Airport

Computer Specials...

Quality Parts In Computers
We Service What We Sell & More
One Call Does It All...

510.770.0399 ▼ 800.454.0399

MULTIMEDIA 486DX2-66

- Pentium Ready MotherBoard With 256K Cache VLB
- AMD486DX2-66 Processor With Fan
- 3 VLB/5 ISA Slots
- 4MB Ram 70 NS
- Quantum 420MB IDE Hard
- Teac 1.44 Floppy Drive
- VLB Super IDE With IO Controller
- 32 Bit VLB SVGA Video Card W/1MB
- 14" SVGA .28dp, 1280x1024, N/I
- 101 Key Keytronics Keyboard
- Mini Tower Case & 230 Watt Power Supply
- Double Speed CD Rom
- Sound Blaster 16 Sound Card
- Deluxe Speakers
- 3–Button Mouse

$1199

PCI 486DX2-66

- ASUS MotherBoard With 256K Cache
- AMD486DX2-66 Processor With Fan
- 4 PCI/4 ISA Slots
- 4 MB Ram 70 NS
- Quantum 420MB IDE Hard
- Teac 1.44 Floppy Drive
- PCE Enhanced IDE controller
- Hi–Speed IO
- Diamond Stealth 64 PCI w/1MB
- 14" SVGA .28dp, 1280x1024, N/I
- 101 Key Keytronics Keyboard
- Mini Tower Case & 230 Watt Power Supply
- 3–Button Mouse

$999

MSC 2X MULTIMEDIA KIT

- Double Speed CD Rom
- 16 Bit Sound Card
- 30 Watt Speakers
- 2 CD Titles

$299

MSC 4X MULTIMEDIA KIT

- Teac Quad Speed CD Rom
- 16 Bit Sound Card
- 30 Watt Speakers
- 2 CD Titles

$399

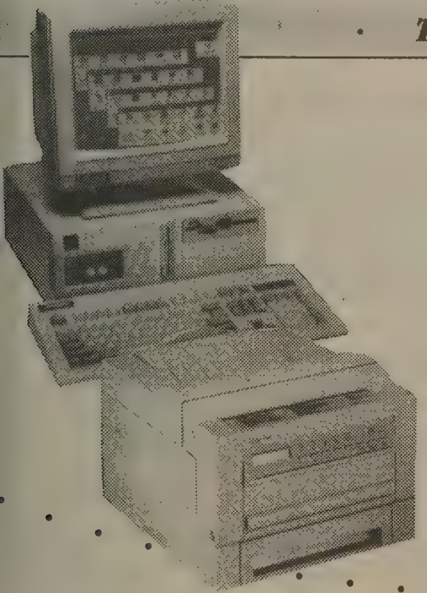
Service Agreement

- Four hour on-site response.
- Computer system kept at peak operation, with one preventive maintenance call a year.
- No additional charge if cost of service exceeds cost of contract.
- By request, end of the year report on all work done with a break down of cost.
- Phone consultation
- Loaners Available
- Technicians carry a full parts kit which allow them to service 95% of the systems on site
- If computers and/or printers are purchased from Micro Service Center, Inc., a one year on-site warranty will be included at no charge.

CD Titles Special with Purchase

Custom Configuration Available

· ***Toshiba*** · ***Epson*** · ***AST Computers*** · ***IBM*** · ***Compaq*** · ***NEC***



- ▼ **Shop Repair With Free Pick-Up & Delivery**
- ▼ **Novell Network Specialist With Consulting Training & Cable Installation**
- ▼ **No Travel Charge**

MICRO
Service Center, Inc.

Computer Service, Repair & Sales

Specializing In:

Networks

Novell, Lantastic, Microsoft, Cabling and Network Management

Special Requests

Data Recovery, Moves & Set-Up, Software and Hardware Consultation

South Bay ▼ 408.292.6336

San Jose, Milpitas, Almaden, Cupertino, Santa Clara, Agnew, Sunnyvale, Mountain View, Los Altos, Los Gatos, Campbell, Saratoga

Sacramento ▼ 916.922.2322

Greater Sacramento, Roseville, Fair Oaks, Rancho Cordova

SERVICE CALLS

On-Site: $85.00 plus parts In-Shop: $65.00 plus parts
Rate are labor charges. (one hour minimum)

FREE PICK-UP & DELIVERY

Certified WMBE Business

We Now Have a TDD LINE
(510) 770-9962

ONLINE SERVICES • BY BILL GRAM-REEFER

CompuServe Forges Ahead With Partners, Acquisitions

Several recent announcements by CompuServe made it clear that the important competition in the burgeoning online arena will focus increasingly on new interactive features for users, in addition to expanded Internet connectivity and services. More importantly, CompuServe's recent moves show that if you can't grow these new technologies in-house, go find—or buy—partners that can help you set the pace.

WorldsAway

In conjunction with Fujitsu's Cultural Technologies division launched in 1994, CompuServe has announced WorldsAway, a new, animated online virtual community that will debut on CompuServe this summer. In a medium where chat makes up about 30% of all online usage, Fujitsu believes that the information superhighway is about people communicating with people rather than just moving data back and forth. To serve that "social computing" segment, Fujitsu has developed an interactive, graphical environment where users can assume character representations of themselves, called avatars.

Using avatars, WorldsAway users can move, communicate, hold and exchange objects, sit on sofas or chairs, and gesture while communicating with representations of other users online. Users will be able to meet and chat with others, attend social functions, take part in scavenger hunts, even create and operate virtual community-based businesses.

The initial concept includes a village where users can meet at public spaces like cafes, or create and decorate apartments and other private places for one-on-one or private group chat. According to Cultural Technologies, WorldsAway's distributed, object-oriented technology is scalable, so the environment can grow to accommodate increasing numbers of users—adding new locales, streets, parks, and buildings on the fly, and managing them remotely across different servers. The technology also provides for developers to create different kinds of worlds or MUDs that can appeal to a wide range of end-user interests.

WorldsAway is in testing now and is expected to be available to CompuServe subscribers by July. WorldsAway will initially support Windows users only, with support for Macintosh users possibly by the end of 1995. WorldsAway software will be priced under $10 and will include an equivalent usage credit. The service will be billed as an extended service to members at $4.80/hr. for up to 14.4Kbps access. CompuServe subscriptions currently run under $10/month.

WorldsAway is the first product to be introduced by Fujitsu's Cultural Technologies Division, formed to create multimedia technologies that will generate 20% of all Fujitsu's revenues by 1997. The WorldsAway team is headed by Chip Morningstar and Randy Farmer, who in the late 1980s helped develop Lucasfilm's Habitat, the first graphical cyber community. Fujitsu eventually licensed, then purchased Habitat from Lucasfilm and introduced it to the Japanese market in 1989. Since 1984 Fujitsu has re-engineered the original Habitat environment for introduction in the US market as WorldsAway.

> **In a medium where chat makes up about 30% of all online usage, Fujitsu believes that the information superhighway is about people communicating with people rather than just moving data back and forth.**

While it may be essentially animated chat, WorldsAway provides the first wide-scale commercial glimpse of the virtual malls, strips, and offices popularized in such recent cyberspace novels as Neal Stephenson's *Snow Crash* and Rudy Rucker's *The Hacker and the Ants*, where advanced hacks and neophytes alike can hang out to see and be seen, cop some code, or maybe get a little work done. The promise of a standardized development framework gives third parties opportunities to create special environments, alien worlds, and cultures. The nature and easy-to-use features will be key if Fujitsu and CompuServe hope to position WorldsAway as something other than a fancy MUD. If it's done right, maybe even Paramount could be convinced to create a virtual Federation-class starship environment for Star Trek junkies.

Fujitsu's "social computing" vision raises questions as to just how much freedom Creative Technologies will allow users and independent developers in creating their own environments or private places with—take your pick—virtual sex parlors, serious hacker con-

WIT...The Last Word In High Performance!

PENTIUM MULTIMEDIA SOUND BOOK

W/10.4" COLOR SCREEN PROVIDES YOU THE FASTEST, LARGEST AND BRIGHTEST GRAPHICS

- Intel Pentium 75 or 90 MHz Processor
- 64-Bit 256K Synchronous Burst External Cache
- 64-Bit 8 MB RAM (Expand to 40 MB)
- 10.4" Dual Scan or Active Matrix VGA Display
- 540 MB HDD (Upgrade to 720MB add $150)
- PCI 64 Bit Video with 1MB Video RAM
- PCI 64 Bit HDD Controller
- 16-Bit Stereo Audio (Sound Blaster & Windows Sound System compatible)
- Built-In Stereo Speakers & Microphone
- External Jacks for Line In & Line Out
- 3.5" Built-In Disk Drive
- Two-Type II/One Type III PCMCIA Slots
- Built-In Center Trackball
- NiMH Battery & AC Adapter
- Advanced Power Management
- Bi-Directional EPP/ECP Parallel Port
- High Speed 16550 UART Serial Port
- Infra Red Wireless "IR" Interface
- External VGA & Keyboard/Mouse Ports
- User Replaceable HDD
- Weight 6.8 lbs
- Carrying Case

TS30P SERIES W/540 MB	TS30PS 10.4" DUAL SCAN	TS30PH 10.4" ACTIVE SCAN
P5-75	$2950	$4000
P5-90	$3150	$4200

UPGRADES:

340/540/810 MB	Add $60/160/380
4/8/16 MB RAM	Add $180/360/650

OPTIONS:

Car Adapter	$75	PCMCIA 28.8 Fax Modem	$325
NiMH Battery	105	PCMCIA 14.4 Fax Modem	150
Docking Station	400	PCMCIA Ethernet Card	150
Ext. Battery Charger	90	PCMCIA 2x CD-ROM	300

MOST COST EFFECTIVE 486 SOUND BOOK

- 486SX-25 to 486DX4-100 Upgradable CPU
- 4 MB RAM (Upgradable to 20 MB)
- 265 MB HDD (Upgradable to 810 MB)
- Internal 3.5" 1.44 MB Floppy Drive
- Two PCMCIA Type II or One Type III Slots
- Built-In Center Trackball with Palmrest
- Built-In 8-Bit Sound Card & Speaker
- Serial, Parallel, Keyboard, Mouse, Ext. SVGA, and Docking Station Ports
- 1 MB VLB w/Video Accelerator Card
- NiMH Battery, AC Adapter
- Carrying Case

TS30 SERIES w/265 MB	TS30M Mono 9.5"	TS30MC Dual Scan 10.4"	TS30ME Active Color 9.5"
SX-25	$1250	$1670	$2400
DX2-66	$1360	$1780	$2500
DX4-100	$1450	$1880	$2600

THE FIRST MOBILE MULTIMEDIA NOTEBOOK SYSTEM
WITH REMOVABLE FLOPPY DRIVE SPACE FOR CD-ROM & 2ND BATTERY!!

- 10.4" 800x600 SVGA Back Lit LCD with Ext CRT 1024x768 Support
- From 486 DX2-66 to Pentium 100 CPUs
- Interchangeable HDD 340/540/730MB Options
- Removable 1.44 FDD Drive & NiMH Battery
- An Optional 3.5" Removable CD-ROM Drive
- One Type III or Two Type III PCMCIA Slots
- Trackpoint Pointing System
- Advanced 16 Bit Stereo Sound Card w/Internal Speakers and Microphone
- A Choice of Mini and Full Docking Stations

CALL FOR DETAILS AND PRICES!!

WIT HIGH PERFORMANCE DESKTOP SYSTEMS

PENTIUM 100 MHz w/256K CACHE	$1720
PENTIUM 90 MHz w/256K CACHE	$1560
PENTIUM 75 MHz w/256K CACHE	$1350
WIT 486DX4-100 w/256K CACHE	$1160
WIT 486DX2-80 VESA w/256K CACHE	$1070
WIT 486DX2-66 VESA w/256K CACHE	$1050
WIT 486DX-40 VESA w/256K CACHE	$1030
WIT 486SX-33 VESA w/256K CACHE	$990

UPGRADES

Per 4 MB	Add $145
14.400 Fax Modem	Add $65
28.800 Fax Modem	Add $135
15" SVGA .28 Monitor	Add $135
17" SVGA .28 Monitor	Add $435
720 MB IDE Hard Drive	Add $60
850 MB IDE Hard Drive	Add $70
1.2 GB IDE Hard Drive	Add $200
Mouse	Add $8
4x Speed CD-ROM Kit w/Sound Card/Speakers	Add $325
2X Speed CD-ROM Kit w/Sound Card/Speakers	Add $195
1.2 MB FDD	Add $42

THE PERFECT COMBINATION... CUTTING EDGE TECHNOLOGY AND AFFORDABILITY!

THESE GREAT SYSTEMS INCLUDE:

- 8 MB RAM
- 1.44 MB Floppy Drive
- 540 MB Hard Drive
- IDE FDD/HDD Controller
- 2 Serial/1 Parallel/1 Game Port
- Mini-Tower Case w/230W Power Supply
- 101-K Keyboard
- Windows Accelerator SVGA w/1 MB
- 14" SVGA .28 dp Monitor (NI)
- 72 Hour Burn-In & Fully Tested

CALL FOR CUSTOM CONFIGURED SYSTEMS

COMMITMENT TO SERVE YOU:

- FREE PHONE TECHNICAL SUPPORT ON ALL OUR SYSTEMS
- 1 YEAR PARTS & 2 YEAR LABOR WARRANTY
- CUSTOMIZED SYSTEMS
- GOVERNMENT P.O.'S WELCOME

ALL AROUND SATISFACTION:

STANFORD UNIVERSITY, UC BERKELEY, IBM,
UNITED POSTAL SERVICE, LOCKHEED, GENERAL ELECTRIC,
AT&T, QUANTUM, CONNER

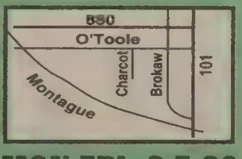
SYSTEM UPGRADES, DIAGNOSTIC, & SERVICE AVAILABLE.
CALL FOR DETAILS

WIT

(408) 433-0188
Fax: (408) 433-0318
Tech Support (408) 433-0709
Wang International Trade, Inc.
2073 O'TOOLE AVE, SAN JOSE, CA 95131

E-MAIL Sales & Tech Support:
nndul5b@prodigy.com

Novell Certified NetWare Engineer



HOURS: MON-FRI: 9-5:30
SATURDAY: 10-3
Prices Subject To Change w/o Notice

Online Services *continued...*

ferences with real credit-card numbers passing around, or wild-eyed burbclaves harboring thoughts of racial purity or political correctness. Additionally, there is the question of how advanced, interactive, and "free" and creative these environments will be allowed to become. For instance, will users' avatars be able to customize environments themselves, hack new objects, code new gestures and capabilities—or be saddled with censorship committees based in Columbus, Ohio?

Spry

Meanwhile, in March, CompuServe purchased Seattle, WA-based Spry, Inc. for an estimated $100 million. This is, perhaps, the largest deal yet for the Internet industry. Spry will become the centerpiece of CompuServe's Internet Division. The acquisition signals CompuServe's broadening program of providing easy-to-use Internet access and services for its commercial and corporate customers.

Spry, Inc., which sells Internet-in-a-Box and AIR Internet Office products, marketed the first shrink-wrapped retail-distribution packages that provide easy desktop computer access for individual and networked PC users. Prior to the acquisition by CompuServe, Spry had previously entered into an agreement with Spyglass, Inc. to license and integrate into its products Enhanced Mosaic, the commercial version of the University of Illinois's popular shareware World Wide Web browser. Enhanced Mosaic 2.0 provides a number of new features that make commerce on the Internet increasingly viable, including standards-based security and a payment-processing framework that enable a variety of business transactions to take place without risk.

In combination with CompuServe's previously announced Point-to-Point (PPP) Internet access, Spry brings to CompuServe the ability to greatly expand its Internet services to its 2.7 million+ customers. CompuServe promises one-click installation of Spry's Mosaic software and cost-effective Internet access from 140 countries worldwide, with more than 420 points of presence for local dial-up connection to the Internet. The acquisition also provides the opportunity for CompuServe to launch future services and to increase its ability to provide secure Internet access for its corporate customers.

CompuServe's Internet Division will be led by Spry's president and founder David Pool. The group will focus on corporate services, such as providing assistance to companies in developing and managing corporate home pages and integrating Web servers based on CompuServe's hardware into a company's enterprise-wide network. Pool's group will also help develop and manage network access and security management. CompuServe's software may be requested by calling 1-800-524-3388, ext. 664. ■

Copyright © 1995 by Bill Gram-Reefer. All rights reserved.

Special Promo $1099
600x1200 30 bit
FACTORY OUTLET
IMAGING EDITORS' CHOICE

Color Scanner Factory Outlet

Flatbed Color Scanners - PC & MAC. customers

AV-6120

AV-680 $529

AV-660 $429

Features & Options:
- 300, 400, 600 DPI optical resolution
- 4800 or 6400 DPI max. resolution
- Letter or legal size paper
- TWAIN compliant
- SCSI or PC interface
- Slide kit free for AV6120
- Prices start at $429 or more
- Free IPhotoplus software
- Optional - Photoshop 3.0 full version

Document Imaging Scanners - PC customers

AV-100

AV-800

Features & Options:
- 256 levels gray scale
- 300 x 600 optical resolution
- Letter or legal size paper
- TWAIN compliant
- Direct PC interface
- 2400 DPI max. resolution
- Ideal for school, goverment, and small business.
- Prices start at $449 or more
- Free OCR software

AVISION LABS INC.

Call AVL at 510-440-8785

48521 Warm Springs Blvd.,
Suite 312, Fremont, CA 94539
Phone: 510-440-8785
Fax: 510-440-8337

Get the BEST the INTERNET has to offer.

The BEST speed:	all lines 28.8 kbps (V.34)
The BEST price:	$30/month for shell and SLIP/PPP
The BEST deal:	no hourly charges, no time limits
The BEST connection:	multiple high speed (T1) links
The BEST SLIP/PPP:	real TCP/IP with static IP numbers
The BEST support:	when YOU need it. Evenings and weekends

You pick the software you want to use and we'll get you online with it. Visit our store. Everything you need to get up and running on the net. •Test drives • Free advice • Free software for MAC or Windows• Local call dial-in numbers throughout area codes 415 and 408.

BEST INTERNET COMMUNICATION, INC.
421 Castro Street, Mountain View, CA 94041
Voice: (415) 964-2378 Fax: (415) 691-4195
info@best.com http://www.best.com

FRAME RELAY available. Call now for the Bay Area's BEST rates!

Serving America's Most Endangered Children
National Headquarters
408-971-4VCA
P.O. Box 909 • Los Gatos, CA 95031-0909
1407 Parkmoor Avenue, Suite 200 • San Jose, CA 95126
HAVE YOU SEEN THIS CHILD?
If so, please call!
800-VANISHED
Sightings ONLY

Ortez, Charmaine Sarah Mae
Date of Birth: 08-20-77
Date Missing: 03-12-94
Missing From: San Jose, CA
Brown Hair & Brown Eyes
Missing Type: Runaway
Vanished Children's Alliance
OUR CHILDREN, OUR FUTURE

HIQ • Computers

HIQ

AT&T Workstation

intel inside

Features:

- Multiple CPU choices including Intel 60 and 90MHz Pentium and a dual processor option with 66MHz CPU
- Up to 512KB of 2-way set associative write-back cache
- Choice of up to 256MB of ECC 128-bit interleaved memory or up to 256MB of Parity memory with 64-bit interleaving
- Extended Industry Architecture (EISA) at 33MB per second with 8 I/O slots with 32-bit bus width per bus master slot
- Integrated support for 540MB IDE hard drives and up to 2GB SCSI
- On board SVGA capabilities with support for 32,000 colors and from 800x600 to 1280x1024 resolution
- Three 5.25" half height user accessible drive bays and five 3.5" internal bays. Netware 3.12, Netware 4.01, UnixWare Personal Edition 1.1, Application Server 1.1 and SCO MPC certified.

New Product

Options:

- High performance RAID controller
- Ethernet, Token Ring and Multi I/O
- 14 to 21 inch VGA monitors
- Uninterruptible power supplies

Operating Systems:

- Windows NT Advanced Server
- SCSO UNIX 3.0
- AT7T UNIX SVR4 MP-RAS

ISO 9000

yes NetWare Tested and Approved

MICROSOFT® WINDOWS NT™ COMPATIBLE

SCO AUTHORIZED RESELLER

BANYAN®

ACERALTOS

Features:

- Choose from 80486DX2/66MHz up to Pentium 90MHz CPU or a multiple processor unit accommodates up to four P66 CPU's
- 128KB to 1MB of second level write-back cache
- From 8MB to 256MB of RAM
- Most systems include an integrated dual-channel Fast SCSI controller
- ISA, EISA and VLB architectures
- Power supplies up to 500 watts
- SCSI disk drive sizes up to 2GB
- Windows NT, Netware, SCO, OS/2 and Banyan compatible
- Three year on-site warranty

New Product

Options:

- Mylex RAID controller
- DAT Tape Drive
- External storage expansion
- SCSI CD-ROM
- Windows NT
- AcerAltos SCO UNIX

3 YEARS ON-SITE WARRANTY

The Standard Open-System Server

Call HiQ Today!
1.800.827.5836

Northern California Locations:

South Bay:
740 N. Mary Ave.,
Sunnyvale, CA 94086
Tel: 408.245.5836;
Fax: 408.245.3108

Marin County:
2048 Fourth St.,
San Rafael, CA 94901
Tel: 415.459.1893;
Fax: 415.459.7248

Sacramento:
1967 Zinfandel Dr.,
Rancho Cordova, CA
Tel: 916.635.7842;
Fax: 916.635.3692

HIQ

1.800.827.5836

HIQ • Computers

MICROSOFT® WINDOWS™ COMPATIBLE

Jupiter Multimedia Systems

All HiQ Jupiter Multimedia systems include the following:

- Intel CPU
- 8MB 70ns RAM
- 256K SRAM Cache
- 1.44MB Teac Floppy
- IDE Enhanced Hard Disk (420 or 540MB)
- VLB IDE Controller
- VLB Video with 1MB
- 2 serial, 1 parallel, GP
- 14" 1024x768 .28dp SVGA NI monitor
- 101 Enhanced Keyboard
- Mid Tower with 230W P/S
- MS DOS/Windows/Mouse
- CD-ROM and Soundcard
- 2 Speakers and Headphones
- Over 30 CD Titles

Ready for pickup today!

intel inside

Jupiter 2

Dual Speed CD-ROM
Diamond Sound Card
420MB IDE Drive

486SX2/50	$1489
DX2/66	$1599
DX4/100	$1649
Pentium	CALL!

Jupiter 4

Quad Speed CD-ROM
Diamond Sound Card
540MB IDE Drive

486SX250	$1599
DX2-66	$1719
DX4/100	$1769
Pentium	Call!

Upgrades:

8MB RAM	$290
32MB RAM	$640
17" Monitor	CALL!
Drive Upgrades	CALL!

Other Jupiter Features:
SoundBlaster Compatible, Wave Table Upgradeable, MIDI Compatible Port, 20 Voice FM Synthesizer, Yamaha OPL-3 Mitsumi, Sony, Panasonic, & IDE interfaces, MPC2 Complaint, Multi-session Photo CD Compatible, Twin Magnetically Shielded Speakers, 100-15,000Hz, 8W speakers.

More Multimedia!

MULTIMEDIA KIT

Microsoft Upgrade Pack!

- Sony CD-ROM 2x
- Creative Labs 16 Sound Card
- Dual amplified speakers

16 Microsoft CD Titles:
Encarta Encyclopedia, Works, Money, Entertainment and More
. . . . **$259**

AirHiQ Pack

- TEAC Quad speed IDE CD ROM (195 MS ACCESS)
- Soundblaster 16
- Two Speakers
- Joystick (four buttons)

Microsoft CD titles:
Flight Simulator, Arcade, and Encarta'95
. . . . **$349**

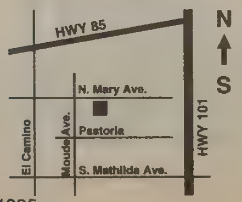
Value Pack!

- Diamond CD-ROM
- Diamond 16-bit Sound Card
- Two speakers
- Over thirty CD titles included
- As included with the Jupiter

Dual Speed	**$329**
Quad Speed	**$439**

All Multimedia Upgrade Kits Include Free Installation!

South Bay Store



Free Financing for 90 Days!
100% Financing Available - Low Monthly Payments
30 Day "No Questions Asked" Money Back Guarantee

- Free Lifetime Technical Support
- One Year Parts and Two Years Labor Warranty
- Customized Configuration and Leasing
- Corporate & Government P.O.'s Welcome!
- With Credit Approval

HIQ

South Bay Area
740 N. Mary Ave.
Sunnyvale, CA 94086
408.245.5836

Sacramento
1967 Zinfandel Dr.
Rancho Cordova,
CA 95670
916.635.7842

North Bay Area
2048 N. First St.
San Rafael, CA 94901
415.459.1893

Atlanta Area
6060 McDonough Dr.
Norcross, GA 30093
404.417.1450

Boston Area
1345 Main St.
Waltham, MA 02154
617.893.1886

Chicago Area
15028 Lagrange Rd.
Orland Park, IL 60462

Store Hours:
Monday-Friday:
9am to 6pm
Saturday:
11am to 4pm

HIQ • Computers

HIQ

HiQ Earth Green PC

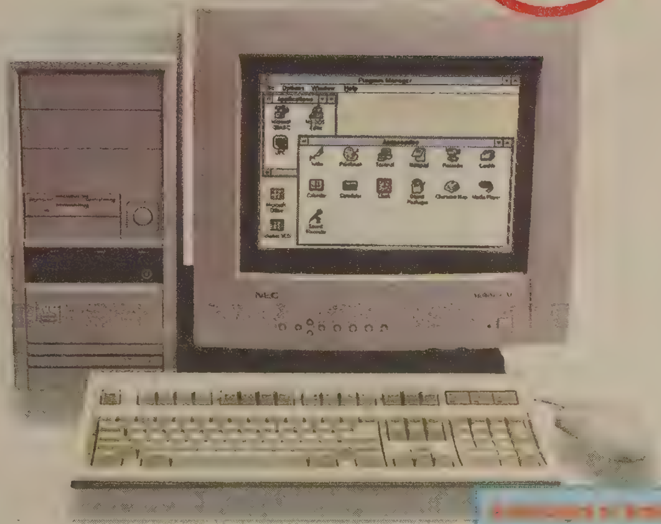
There's only one choice,
Editors Choice-HiQ

- Intel 486DX2-66 Processor
- 8MB RAM (exp. to 64MB)
- 256K SRAM Cache
- 1.44MB Teac Floppy Drive
- 540MB IDE Enhanced Hard Drive
- 32 bit VLB IDE Controller
- 2S, 1P, and 1 Game Ports
- 32-bit Cirrus Logic VLB
- 15" 1024x768 .28dp Green Monitor
- 101 Enhanced Keyboard
- Mid Tower Case with a 230W P/S, 7 Bays
- MS DOS 6.22 and Windows 3.11
- Serial Mouse and Mouse Pad

486DX2/66.......$1399
486DX4/100....$1479
Pentium.........CALL!

The HiQ Earth Green PC was selected over several well known systems by PC Magazine's staff of Editors to receive the coveted Editor's Choice Award. If power usage is your concern, go with a winner and choose HiQ's Earth Green PC.

intel inside



[illegible]

1. Save on your electricity bill
2. Reduce air pollution
3. Prolong your system's life

PC MAGAZINE EDITORS' CHOICE
April 26, 1994
HiQ 4DX66 Green PC System
Excellent DOS Applications

PC MAGAZINE EDITORS' CHOICE
April 26, 1994
HiQ 4DX66 Green PC System
Excellent Windows Applications

PC EDITORS' CHOICE
April 26, 1994
HiQ 4DX66 Green PC System
Best Value Among EPA Systems

PC MAGAZINE

MICROSOFT® WINDOWS™ COMPATIBLE

More 486 Systems

PC MAGAZINE
Feb 23,1993

HiQ Mercury Station

A fast 486DX/33 processor combined with a host of quality components drove the HiQ Ultimate 433i to score across a range of PC Lab's performance test, making the unit unusually versatile for the price.

- Intel 486 CPU
- 4MB 70ns RAM
- VLB Motherboard
- 256K SRAM Cache
- 1.44MB Floppy Drive
- 540MB Enhamced IDE Drive
- VLB IDE Controller
- 2 Serial, 1 Parallel, GP
- VLB SVGA Video w/ 1MB
- 14" 1024x768 .28dp SVGA Monitor
- 101 Enhanced Keyboard
- Mid Tower w/ 230W PS
- MS DOS 6.22 and Windows 3.11
- Serial Mouse w/ Pad

486DX4/100 (AMD) $1189
486DX2/66 (INTEL) $1119
486DX2/50 (INTEL).....$1029

HiQ Mars Station

- ASUS PCI/Vesa local Bus, Green, 256k
- 8MB of RAM 70ns
- TEAC 1.44MB 3.5" Floppy Disk Drive
- 540MB Enhanced IDE Hard Drive
- PCI/VLB IDE Controller Card, 32 bit Built-in
- PCI Trident 9440 1MB Vedio Card
- 15" IMPRESSION SVGA Monitor 1024x768
- Non-Interlaced, .28 DP
- 101 Enhanced Keyboard, Keytronics Pro
- Mid Tower Case w/ 230 Power Supply
- (7) Drive Bays- (3) 5.25, (2) 3.5, Internal (2) 3.5
- Microsoft Ergonomic Mouse
- MS DOS 6.22 Installed w/ Manuals
- MS Windows 3.11 Installed w/ Manuals

486DX2-66MHz (INTEL) ..$1399
486DX4-100MHz (AMD)...$1419
486DX4-100MHz (INTEL)...$1499

Call HiQ Today!
1.800.827.5836

Northern California Locations:

South Bay:
740 N. Mary Ave.,
Sunnyvale, CA 94086
Tel: 408.245.5836;
Fax: 408.245.3108

Marin County:
2048 Fourth St.,
San Rafael, CA 94901
Tel: 415.459.1893;
Fax: 415.459.7248

Sacramento:
1967 Zinfandel Dr.,
Rancho Cordova, CA
Tel: 916.635.7842;
Fax: 916.635.3692

HIQ
HiQ Computers

1.800.827.5836

HIQ

H i Q • C o m p u t e r s

Prices Reduced on Pentium Systems!

PC WORLD

January 1995

"HiQ Neptune P90. Our test scores show that HiQ's debut a fast Pentium-90 is one of the mightier machines we've tested. We weren't surprised to find lots of expansion"

PC MAGAZINE

Nov/Dec 1994

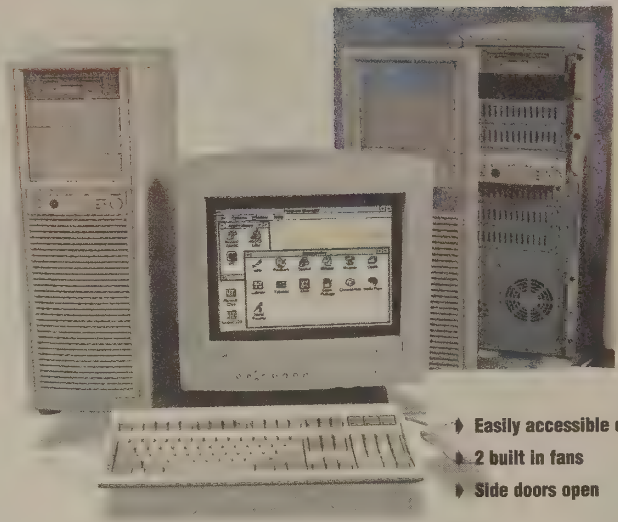
"HiQ Neptune P90/PCI performed consistently well, with a Graphics WinMark 95 score solidly above-average."

MICROSOFT® WINDOWS NT™ READY TO RUN

HiQ Neptune Powerstation

- Intel Pentium CPU
- PCI Motherboard
- 16MB 70ns RAM
- 256K SRAM Cache
- 1.44MB Teac Floppy Drive
- 1GB Wide SCSI Hard Drive
- Adaptec 2940W PCI Wide SCSI Controller
- 2 Serial, 1 Parallel, GP
- Diamond Stealth 64 w/ 2MB DRAM
- 15" 1024x768 .28dp SVGA Monitor
- 101 Enhanced Keyboard
- Full Tower w/ 230W PS
- MS DOS 6.22 and Windows 3.11
- HiQ Serial Mouse w/ Pad

Neptune P100	**$3199**
Neptune P90	**$2999**
Neptune P75	**$2799**
Neptune P66	**$2779**



- **Easily accessible case**
- **2 built in fans**
- **Side doors open**

Entry Pentium HiQ Venus Station

- Intel Pentium CPU
- PCI Motherboard
- 8MB 70ns RAM
- 256K SRAM Cache
- 1.44MB Teac Floppy Drive
- 540MB Enhanced IDE Drive
- PCI IDE Controller
- 2 Serial, 1 Parallel, GP
- PCI SVGA Video Card w/ 1MB
- 14" 1024x768 .28dp SVGA Monitor
- 101 Enhanced Keyboard
- Full Tower w/ 230W PS
- MS DOS 6.22 and Windows 3.11
- Serial Mouse w/ Pad

P100	**$2049**
P90	**$1939**
P75	**$1739**
P66	**$1659**

HIQ Uranus Pentium90 Dual Processor

- Dual Pentium 90MHz CPUs
- EISA/PCI Motherboard
- 16MB 70ns RAM
- 256K SRAM Cache
- 1.44MB Teac Floppy Drive
- 1GB Wide SCSI Hard Drive
- Adaptec 2940W PCI Wide SCSI Controller
- 2 Serial, 1 Parallel, GP
- Diamond Stealth 64 w/ 2MB DRAM
- 15" 1024x768 .28dp SVGA Monitor
- 101 Enhanced Keyboard
- Full Tower w/ 230W PS
- MS DOS 6.22 and Windows 3.11
- HiQ Serial Mouse w/ Pad

Price	**$4259**

HIQ Saturn Station

- Intel Advanced/ZP Motherboard
- INTEL TRITON CHIPSET
- 256K CACHE
- Intel CPU
- 16MB of RAM 70ns
- TEAC 1.44MB 3.5" Floppy Disk Drive
- WD 1.2GB IDE Hard Drive
- PCI IDE Controller, Built-in
- PCI Diamond Stealth 64 w/2MB DRAM
- 15" Hitachi Super VGA Monitor 1024x768 Non-Interlaced .28 DP (3 years warranty)
- 101 Enhanced Keyboard, Keytronics Pro
- Mid Tower Case w/ 230 Power Supply
- (7) Drive Bays- (3) 5.25, (2) 3.5, Internal (2) 3.5
- Microsoft Ergonomic Mouse
- MS DOS 6.22 Installed w/ Manuals
- MS WFW 3.11 Installed w/ Manuals

Pentium 75 MHz (INTEL)	**$2349**
Pentium 90 MHz (INTEL)	**$2549**

Pentium Advanced/ZP

The new features of Intel Advanced/ZP motherboard are 100MB/second PCI Data streaming, Mode 4 Bus Mastering IDE, and pipeline memory performance using Fast Page Mode or EDO DRAM - provide great performance and flexibility for today's and tommorrow's multimedia and communications applications.

- High performance computing
- Extra bandwith for multitasking and Native Signal Processing-based multimedia and communication
- Easy to configure and setup; ready for Windows 95
- Native Signal Processing and multimedia support, ready-to-run showcase applications, on-line documentation and help, and more!
- Ready for Energy Star* and Windows 95 Instant On systems
- High degree of flexibility for expansion
- Upgrade to meet future computing needs Protect user's investment

South Bay Area
740 N. Mary Ave.
Sunnyvale, CA 94086
408.245.5836

Sacramento
1967 Zinfandel Dr.
Rancho Cordova,
CA 95670
916.635.7842

North Bay Area
2048 N. First St.
San Rafael, CA 94901
415.459.1893

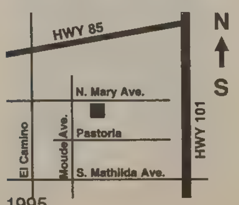
Atlanta Area
6060 McDonough Dr.
Norcross, GA 30093
404.417.1450

Boston Area
1345 Main St.
Waltham, MA 02154
617.893.1886

Chicago Area
15028 Lagrange Rd.
Orland Park, IL 60462

Store Hours:
Monday-Friday:
9am to 6pm
Saturday:
11am to 4pm

South Bay Store



Free Financing for 90 Days!
100% Financing Available - Low Monthly Payments
30 Day "No Questions Asked" Money Back Guarantee

- Free Lifetime Technical Support
- One Year Parts and Two Years Labor Warranty
- Customized Configuration and Leasing
- Corporate & Government P.O.'s Welcome!
- With Credit Approval

HIQ
HiQ Computers

HIQ • Computers

HIQ

yes
NetWare
Tested and Approved

MICROSOFT®
WINDOWS NT™
COMPATIBLE

New RAID Systems from HiQ!

(Redundant Array of Inexpensive Disks)

For Ultimate Fault Tolerance

Features

- Hot Swappable disk drives
- 1GB to 12GB capacity
- Redundant power supplies
- Mirroring, duplexing and RAID levels 0, 1, and 5 fully supported
- Hardware and software implementations
- SNMP compliant
- Novell Netware 3.1x, 4.1x and Windows NT Advanced Server Certified
- Five Year Warranty

What is RAID?

RAID stands for Redundant Array if Independent Disks. Simply put, RAID is a storage technology - a subsystem consisting of two or more disk drives working as one. That's misleading, though, because RAID is far more complex. It's a cost effective form of protection that can automatically reconstruct data after a disk crash without forcing you to take your system down. Think of RAID as a sort of miraculous high-tech tire - one that could fix itself even as your car races down the freeway.

How Will RAID Benefit Me?

Reliability

With multiple disk drives, redundant power supplies and fans, the mean time between data loss (MTBDL)) is in excess of 5 million hours. This is crucial when data needs to be available at all times. A drive failure no longer means loss of data or even loss of access to your data.

High Availability

The system is fault tolerant. Menu hardware components, including disk drives, can be replaced while the system remains active, and data remains accessible.

Cost Effectiveness

Using RAID 5, it is possible to provide drive fault-tolerance without doubling the total storage capacity and cost; six 1 GB disk drives provide 5 GB of useable storage. Using mirroring (RAID 1), ten 1 GB disk drives would be required to provide 5 GB of useable storage. The average cost per MB of the Conner CR6-RAID system is no more than mirroring or duplexing and provides fault tolerance.

Flexibility

Most RAID systems have the capability to add capacity by either upgrading the disk drives or by adding modules to the RAID system. Selectable RAID levels also offer different combinations of fault tolerance, capacity and performance. Multiple bus and operating compatibility is offered as well as options for hardware or software RAID implementations.

Increased Capacity

RAID offers an easy way to add hard disk drives to the network. Multiple low capacity disks can be accessed as one large volume.

CONNER

New Linux Performance System

Features

- Pentium 90 MHz 256k cache
- 16 MB RAM
- 1.44 MB Floppy Disk Drive
- Double Speed CD ROM
- 16 Bit Sound Card
- PCI SVGA Card
- 15" SVGA Monitor
- 1 GB Hard Disk

- Linux is the first full UNIX operating system capable of running on a PC along w/MS Dos and Windows
- Performanced equivalent to or better than expensive UNIX workstations
- Built in communication andnetworking TCP/IP, UUCP, NFS, Telenet, FTP, E-Mail,SLIP, PPP, and More
- Graphical Interfaces and Tools: X11,Xview,Motif(Optional), Tel, and TK
- GNC development system: Small Talk, Liop, Prolog, and Ada
- GNC C/C++ Compiler, Assembler and Devugger for 8800, 80386,6800, Sparc & RS/600
- Interpreters: Pascal to C, Fortron to C, Simula to C, APL and Rexx
- Parser Generators and Lexical analyzers: Bison, Flex, Lex, and Yacc
- Tools and Utilities: TGX, Latex, EMacs, Groff, Troff, Textinfo, Sediawk, Perl and Ghostscript
- Full UNIX Utilities and thousands of free applications from the Internet around the world.
- System is configured and tested to ensure compatibility and performance

On Display Now

$2,759

1.800.827.5836

Tel: 408.245.5836 • 1.800.827.5835
740 North Mary Avenue, Sunnyvale, Ca 94086

Ordering Information: Shipping and handling additional. Corporations rated 32A or better and Government accounts are accepted on a 30 net basis, C.O.D. orders over $500 add $10.00 special handling. Fill returns must have prior authorizations from our Customer Service Department 408.245.5836. Fill returns must be in original packaging and include all warranty cards and manuals. Incomplete product returns, unauthorized returns and refuse shipments are subject to a 20% re-stocking charge. Fill prices and specifications are subject to charge without notice. All trademarks belong to their respective companies. Not responsible for typographical errors.

HIQ

BUY • SELL • UPGRADE • EXCHANGE • TRADE-IN • BUY • SELL • UPGRADE • EXCHANGE • TRADE-IN
Monthly Special!
Upgrade Your 486DX2-66 to a Pentium™ Processor 90MHz for $ 400
CPU & MEMORY XCHANGE CLUB
intel pentium
SAN FRANCISCO

- Upgrading to a faster CPU?
- Wondering what to do with the old CPU?
- Does your new system board require 72-pin SIMM's?
- Want to upgrade from 8MB to 16MB, but all your memory expansion slots are full?
- Want to exchange your 80nS and 70nS memory for 60nS SIMM's to keep up with your faster CPU?

☞ **Wish to trade-in your 30-pin SIMM's for 72-pin SIMM's?**

☞ **Shopping for new memory and CPU?**

Call (408) 654-9090

Yes, we accept corporate purchase orders (subject to approval).
Prices are subject to change without notice.

CPU & Memory Xchange Club
2370 Owen St., Suite B, Santa Clara, CA 95054
Tel: 408-654-9090 • Fax: 408-654-0415
San Francisco Office: 415-837-1335
Office Hours: M-F 9-6 • Sat & Sun 12-5

Pentium is a trademark of Intel Corporation. Prices and specifications subject to change without notice. All product names or company names are trademarks or registered trademarks of their respective companies. © Copyright, 1995 CPU & Memory Xchange Club

Pretty Good Privacy

Why You Should Know About PGP And How To Use It

By Robert Moskowitz

> **Not only that most telephone lines are not secure, but that nearly all the privacy we take for granted is not secure.**

Suppose the US Post Office suddenly insisted that no one could enclose their letters in envelopes? Suppose all telephone lines were turned into old-fashioned "party lines," not only sharing your phone calls with your neighbors, but with anyone else who cared to listen in?

Obviously, you wouldn't like it. Not because you were keeping dirty little secrets (although, as Sam Spade says in *The Maltese Falcon*, "Everybody has something to hide."), but because you have an expectation of privacy. In fact, you have such a strong expectation of privacy in your communications that you expect to have some precisely where you don't—on the Internet!

Don't be too surprised. There's very little privacy anywhere.

A friend of mine a few years back worked for the government. Whenever she answered the telephone at work, she had to begin with the prescribed words: "This line is not secure."

That put a different twist on the world for me, and I began to realize not only that most telephone lines are not secure, but that nearly all the privacy we take for granted is not secure.

This point of view was underscored for me recently, when my cellular phone was illegally cloned. One day I got a call from my cellular phone service provider. "Your phone has been cloned," a young woman told me, brightly. How did they know? "Easy. We monitor all subscribers for their patterns of calling," she said, without a trace of self-consciousness. "In fact, we tape every minute of every phone call we handle, just to have a record of who's making them."

And of what has been said, perhaps?

You may think I'm paranoid, but consider the case of Ian Murphy. Today, he's president and chief executive officer of IAM/Secure Data Systems, Inc., Gladwyne, PA, but in 1981 he became one of the first hackers to be arrested, for tapping White House phone lines and tampering with telephone company computers. Murphy is busy, and successful, selling computer security—such as it is. His clients range from foreign governments and the White House to major corporations, and they're happy with his services.

But—are you sitting down?—Mr. Murphy won't have a Web home page. In fact, he won't even have an email address! He knows first hand how little security there actually is on today's computer networks, and while he's in the business of making other people feel safe, he won't put his own firm's information into a situation where he knows it can be compromised quite easily by people just like himself.

So that's the long version of why you need to know about Pretty Good Privacy.

PGP

Pretty Good Privacy, or PGP, is an extremely sophisticated, yet fairly easy to use encryption system for use with MS-DOS, Macintosh System 7.x, UNIX, VAX/VMS, and other computers.

It incorporates a highly advanced form of public, or two-key, encryption to allow the exchange of files not only with "pretty good privacy," but with equally good authentication. In other words, if you receive a PGP-encrypted file that appears to be from me, you can be certain that it actually is from me, and that it hasn't been tampered with since I encrypted it.

What's more, because it uses public-key encryption, there is no need for a secure channel to transmit your messages. The files you encrypt and send to others, along with your public key, can be freely distributed over public computer networks.

That's the whole point of public-key encryption systems. (See box: Understanding Public Key Encryption). The only key that really matters for security is your private key, and that one you keep with you, never transmit to anyone, and can therefore be pretty sure of.

How safe are PGP-encrypted files? In a benchmark test, a file encrypted via PGP using only a 128-bit key was made publicly available. It took a cadre of the world's most enthusiastic crackers about eight months to decode it. Today, PGP is capable of using 2033-bit keys, which have never yet been cracked.

PGP is available to individuals for personal, noncommercial use as freeware from many different bulletin boards and Internet sites. It is also available for a fee from ViaCrypt, based in Phoenix, Arizona. For legal reasons, commercial firms in the US and Canada must use only a licensed version of the software from ViaCrypt. (Contact ViaCrypt by telephone at 602/944-0773, or on the Internet at *viacrypt@acm.org*.)

Once you get PGP, you can generate your unique pair of keys—one to make public, and one to keep private. You will also want to begin to accumulate the public keys from people with whom you intend to communicate.

This is easy because there are PGP servers on the Internet that do nothing but keep track of public keys. You upload your own key to one of them—they automatically share all the public keys with each other—and you can also download whichever public keys you want.

Encrypting And Decrypting Messages

To encrypt a message, first compose it in your favorite word processor or text editor. Then save it, either as a formatted word processor file if you're sure your recipient wants to receive it that way, or as a plain ASCII file.

Next enter the command "pgp -e textfile her_userid" (if you have a front-end program, it

Security For The Macintosh

System 7.5 includes its own encryption and authentication capabilities, but most people consider these nearly worthless. Since Apple wanted to export their operating system, they complied with US government restrictions on the encryption techniques they could use. Even worse, the key length is limited to 40 bits, far less secure than a 1024-bit key would make the same files.

Fortunately, there is a version of PGP for the Macintosh. Users report that MacPGP is fairly simple to use, and its encrypted files are entirely compatible with PGP software for other operating systems.

However, the PGP code was ported to System 7.x from original source code, and only then was a Mac interface grafted on. As a result, MacPGP does not operate in true Mac style.

Also, MacPGP can't be linked directly to email. This means you must download all your messages, then get into PGP and decrypt each one separately.

Even worse, not every Macintosh can use MacPGP. Some users complain the software will not run—sometimes won't even load—on their Mac Plus, probably because the front-end interface is not entirely compatible with Mac Plus hardware requirements.

Other users complain there are too many user selectable options, and changing options is more difficult than with preferences files. There are some who want at least a few MacPGP options to be made into defaults.

Managing Keys

Because PGP relies on having the right keys for encoding and decoding files, you must pay attention to certain simple key-management procedures:

To Create Your Own Keys

Start by giving PGP the command "-kg". This triggers a key generation sequence which includes a request for some random typing by you. PGP uses your keystroke timing and sequence patterns to help generate a unique key-pair for you.

The program also asks you how many bits to use in creating your new keys. The more bits you specify, the more time it takes to encode and decode files, but the more security you obtain.

Finally, PGP asks you to specify a passphrase, just to make it a little harder for anyone to use your secret key if they should somehow obtain it. Don't write it down, or choose one that is easy to guess, such as your birthday or middle name. Of course, should you suspect your secret key has been stolen or copied, you immediately use PGP to create a Key Revocation Certificate which, along with a brand new public key, you disseminate as quickly and as widely as possible.

When you first get the program, you might want to experiment a bit. For example, you can generate two pairs of 5- or 10-bit keys, plus a one-paragraph file to encrypt and decrypt and send to your other self a few times. This helps you get the hang of the process. But you won't need much practice: PGP is generally simple and straightforward to use, and fully explained in the documentation that comes with the program. If you have a problem, you can usually get help from *jis@mit.edu* or by posting a message in the alt.security.pgp newsgroup.

To Obtain Other People's Public Keys

The easiest way, of course, is to ask for them. Your colleagues, clients, and friends can easily email you their public keys, and PGP makes it easy to add each one to your "public keyring"—a file where PGP looks for such information when asked to encode an outgoing message.

But you can also get public keys from other sources: specialized public key servers on the Internet, such as *pgp-public-keys@pgp.mit.edu* and Four11 *info@four11.com* . Since these servers share public keys and Key Revocation Certificates with each other, communicating with just one is normally enough to get you what you want.

If A Secret Key Is Compromised

Give PGP the command "-kd" with the person's identifier. If you give your own identifier, the software creates a special file you make public as widely as possible. This file tells other copies of PGP not to use the corresponding public key any longer. If you give someone else's identifier, PGP disables that key on your public keyring.

HKG COMPUTERS

$0 DOWN

South Bay Patriot Notebook's Superstore

16 MB 72Pin MEMORY $440.00

90 Days Same As Cash
While Supplies Last

INSTANT CREDIT!

Multimedia Notebook

- -16 Bit SB Comp Sound Card
- -Built-In Logitech Trackball
- -Large 10'3" Color Screen
- -NiMH Battery
- -VESA Local Bus Video w/1 MB RAM
- -Built-In Microphone & Speaker
- -640x480 Resolution w/256 Color
- -2 PCMCIA Type II or 1 Type III Slots
- -Upgradable to 32 MB RAM
- -Removable 1.44 Floppy Drive
- -Docking Station Available
- -Carrying Case and AC Adapter Included
- -Built-In APM Compliant Power Management
- -Space for 2ns Battery w/Floppy Drive Removed

PATRIOT
4000

9.5" Mono Screen with 4MB RAM

Hard Drive	340MB	520MB	710MB	810MB
486DX2-66	**$1441**	**$1548**	**$1701**	**$1808**
486DX4-100	**$1537**	**$1644**	**$1797**	**$1904**

10.3" Dual Scan Color Screen with 4MB RAM

Hard Drive	340MB	520MB	710MB	810MB
486DX6-66	**$1801**	**$1898**	**$2067**	**$2168**
486DX4-100	**$1897**	**$2004**	**$2157**	**$2264**

9.5" Active Matrix Color Screen with 4MB RAM

Hard Drive	340MB	520MB	710MB	810MB
486DX2-66	**$2706**	**$2814**	**$2966**	**$3074**
486DX4-100	**$2802**	**$2910**	**$3062**	**$3170**

We also carry Pentium notebooks and a 3.3lb. sub-notebook
Prices updated weekly, please call for the latest prices

PENTIUM PCI SYSTEMS

- Intel Chipset MB (256K)
- 8MB 70ns RAM
- 420 MB Hard Drive
- PCI SVGA 1 MB Video
- PCI EIDE (4HD+2FD)
- MS Comp. Mouse
- Mini Tower Case
- Teac 1.44 Floppy
- 14" .28dp NI Monitor
- 101 Keys Keyboard
- Fast I/O (2S,1P)
- CPU & Heat Sink

PENTIUM 60...$1399
PENTIUM 66...$1439
PENTIUM 75...$1469
PENTIUM 90...$1699
PENTIUM 100....$1869
PENTIUM 120....$2189

486 VLB SYSTEMS

- 256K Cache
- Teac 1.44 MB Floppy Drive
- VLB SVGA 1 MB Video
- VLB Enhanced IDE (4HD+2FD)
- Mini Tower Case
- Microsoft Compatible Mouse
- 4 MB RAM
- 420 MB Hard Drive
- 14" SVGA Monitor
- 101 Keyboard
- I/O Ports (2S,1P,1G)
- CPU Heat Sink + Fan

INTEL		AMD	
486DX2-66	**$965**	**486DX2-66**	**$929**
486DX4-75	**999**	**486DX2-80**	**955**
486DX4-100	**1069**	**486DX4-100**	**985**

IBM 486 SLC2-66....$849

UPGRADE YOUR SYSTEM TODAY!

We Provide:
1.Free Estimate 2.One Year Parts and Labor Warranty

Labor Charge:
CPU & Memory Upgrade $10
Motherboard Upgrade $20
System Trouble Shooting $40
Installation for HDD $20
Multimedia Kit Installation $20

Audio/CD-ROM

SoundBlaster 16 (OEM)	$75
SoundBlaster 16 MCD (ASP)	169
SoundBlaster 16 SCSI (OEM)	110
Sony 55E Double Speed IDE CD-ROM	120
Mitsumi 4X CD-ROM	199
Toshiba 3501B 4X SCSI CD-ROM	299
50W Powered Speakers	39
75W Powered Speakers	55

Video Cards

ISA Trident 512K/1MB	$36/55
VLB Cirrus Logic 1 MB (5429)	73
VLB Trident 1 MB (9440)	70
VLB Diamond Stealth 1 MB DRAM	132
Diamond Stealth 64 2/4MB VRAM	280/446

Hard Drives

210 MB IDE	$135
420 MB IDE	175
520 MB IDE	185
730 MB IDE	250
850 MB IDE	260
OTHERS	CALL

Monitors

14" SVGA .39dp	$199
14" SVGA .28dp	209
14" SVGA .28dp NI	217
15" Impression 5, Flat Scr	316
17" Impression 7, Flat Scr, Low Rad	615
14" ViewSonic 6E NI	265
17" ViewSonic 17G, Flat Scr, Low Rad	799

Modems & Tape BackUp

14400/14400 Fax Modem Int	$50
14400/14400 Fax Modem Ext	70
14.4 Fax Modem w/Voice Int	70
14.4 Fax Modem Ext	75
Aiwa Tape Back-Up 250MB	120
Colorado Tape Back-up 250MB Int	189

CPU:

INTEL		AMD	
486DX2-66	$155	486SX2-66	$75
486DX4-75	195	486DX2-66	125
486DX4-100	256	486DX2-80	145
Pentium 60	265	486DX4-100	175
Pentium 66	309		
Pentium 75	339		
Pentium 90	555		
Pentium 100	735		
Pentium 120	1045		

Memory

30 PIN		72 PIN	
1 MB	$38	4 MB	$150
4 MB	130	8 MB	300
		16 MB	440

PRICES CHANGE DAILY
CALL FOR LATEST PRICES

MULTIMEDIA SPECIAL

AMD 486DX2-80

- Mini-Tower Case
- 256K Cache on Board
- 4 MB of RAM
- 420 MB Hard Disk
- 14" SVGA Monitor NI .28mm
- 1 MB SVGA Card VLB
- 32 Bit VLB Enhanced IDE+ I/O Card
- 1.44 Floppy Drive
- Sound Blaster 16 Sound Card
- Double Speed CD-ROM Drive
- 40 Watt Amplified Speakers
- Microsoft Compatible Mouse
- 101 Keys Keyboard
- CPU Heat Sink & Fan

$50 OFF CD-ROM TITLES

$1169

$58.36 P/Month O.A.C.

Multimedia PCI Pentium 75/90

- UMC ChipSet Motherboard
- 256K Cache
- 8MB RAM
- Teac 1.44 Floppy Drive
- 540 MB Hard Drive
- 15" SVGA .28 NI Monitor
- PCI SVGA 1MB Video (64 Bit)
- SoundBlaster 16 Basic
- Mitsumi 4X CD-ROM
- 50W Powered Speakers
- 101 Keyboard
- PCI EIDE (4HD + 4FD)
- Fast I/O Ports (2S, 1P, 1G)
- Microsoft Compatible Mouse
- CPU Heat Sink + Fan
- Mini Tower Case

$50 OFF CD-ROM TITLES

P-75	P-90
$1829	**$2049**
$91.31	**$102.25**

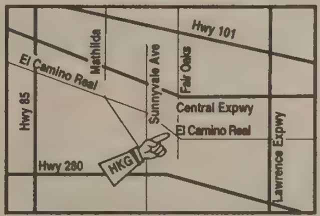
P/Month O.A.C.

448-EAST EL CAMINO REAL (next to Charles Schwab)
SUNNYVALE, CA 94087

For Orders: 800-308-0818
Technical Support: (408) 733-5457
(408)-SEEK-HKG (733-5454)
Fax: (408) 733-5456
EMail: HKGCOMP@aol.com
Prices Subject To Change w/o Notice
CALL FOR LATEST PRICES

DISCOVER MasterCard VISA

Mon-Sat: 10am-7pm
Sun: Closed
Corporate PO's Welcome



GIFT CERTIFICATES
AVAILABLE!

Pretty Good Privacy *continued...*

may work somewhat differently than explained here) to trigger the encryption process, specifying both the name of the file and the person for whom you want that file encrypted.

You refer to the file by its regular file name, and to recipients (or senders of files you receive) by a simple identifier. Most people use their full name plus their email address (such as "Robert A. Moskowitz <robertam@aol.com>") as their identifier to limit the chance that anyone will specify the wrong person. PGP automatically associates each identifier with the complex computer "key" it uses to encode or decode files to/from that person.

If you're planning to email the encrypted file to your recipient, you should include the letter "a" in the above command string (or select that option from your PGP front end). This forces PGP to convert the encrypted file into only the alphanumeric characters that email systems can handle. If you don't select this option, be sure to transmit encrypted files as if they were program files, using the "binary" or similar option. Or save them to a floppy disk and send that.

When you receive a PGP-encrypted file, you decrypt it by issuing the command: "pgp ciphertextfile". This assumes the encrypted file carries a ".pgp" filename extension. If it doesn't, just type in the full filename as it exists. Normally, PGP tries to save the decoded message in a file with a name similar to the encoded filename it has just processed. However, if you add the optional command "-o," you can specify whatever name you prefer for the decoded file.

PGP does its work by copying files, so it leaves your original message files, and the original encrypted files you receive from others, untouched.

If any of this is too esoteric for you, look around the Net (the newsgroup alt.security.pgp is a good place to start) for software that provides a Windows or DOS front end. This takes much of the learning and difficulty out of the process of using PGP for all your communications. ■

Copyright © 1995 by Robert Moskowitz. All rights reserved.

See page 124 for more on public-key encryption systems.

A Summary Of PGP's Most Frequently Used Commands

Encryption Commands:

`pgp -e textfile her_userid`

This command encrypts a plaintext file with the recipient's public key.

`pgp -s textfile [-u your_userid]`

This command signs a plaintext file with your signature, using your own secret key.

`pgp -sta textfile [-u your_userid]`

This command signs a plaintext file with your signature, using your secret key, and leaves the output readable to people without running PGP first.

`pgp -es textfile her_userid [-u your_userid]`

This command signs a plaintext file with your signature, using your secret key, and then encrypts it with the recipient's public key.

`pgp -c textfile`

This command encrypts a plaintext file using conventional single-key cryptography. This is most useful only for storing files that you will later retrieve.

Decryption Commands

`pgp ciphertextfile [-o plaintextfile]`

This command decrypts an encrypted file, or checks the signature integrity of a signed file.

`pgp -e textfile userid1 userid2 userid3`

This command encrypts a message that can be decrypted by any one of any number of recipients.

Key Management Commands

`pgp -kg`

This command generates your own unique public/secret key pair.

`pgp -ka keyfile [keyring]`

This command adds a public or secret key to your public or secret "keyring."

`pgp -kx userid keyfile [keyring]`, or `pgp -kxa userid keyfile [keyring]`

This command extracts (copies) a specific key from your public or secret keyring.

`pgp -kv[v] [userid] [keyring]`

This command allows you to view the contents of your public keyring.

`pgp -kvc [userid] [keyring]`

This command allows you to view the "fingerprint" of a public key, useful if you want to verify it over the telephone with its owner.

`pgp -kc [userid] [keyring]`

This command allows you to view the contents of your public keyring, and check the keys' certifying signatures.

`pgp -ke userid [keyring]`

This command allows you to edit the userid or passphrase for your secret key.

`pgp -ke userid [keyring]`

This command allows you to edit the "trust" parameters for a public key.

`pgp -kr userid [keyring]`

This command removes a key or a userid from your public keyring.

`pgp -ks her_userid [-u your_userid] [keyring]`

This command allows you to sign and certify someone else's public key on your public keyring.

`pgp -krs userid [keyring]`

This command allows you to remove selected signatures from a userid on a keyring.

`pgp -kd your_userid`

This command allows you to permanently revoke your own key, issuing a Key Revocation Certificate for transmission to other PGP users.

`pgp -kd userid`

This command allows you to disable or re-enable a public key on your own public keyring.

Obtaining PGP

PGP Software is generally obtainable free of charge, and online.

First, use anonymous FTP to connect with net-dist.mit.edu and switch to the directory /pub/PGP. Download the README file for instructions. This will tell you to download rsalicen.txt and mitlicen.txt, which contain license agreements for the internal algorithms used in PGP, and for the software itself.

If you can agree to comply with the terms of these licenses, you Telnet to net-dist.mit.edu and login with the word "getpgp".

MIT's computer now asks you four questions, and then gives you the directory name where the PGP software is located. This name changes every half hour, so once you get the name, use FTP to log in and download the PGP files right away.

After you unpack the compressed PGP system files, you'll see that PGP comes with plenty of documentation and background discussion material. Also, the program comes ready to operate in English, French, Spanish, German, Italian, and Brazilian Portuguese.

Please note: PGP is export restricted by the Office of Export Administration, United States Department of Commerce, and the Offices of Defense Trade Controls and Munitions Control, United States Department of State. This means that PGP cannot be exported or re-exported, directly or indirectly, (a) without all export or re-export licenses and governmental approvals required by any applicable laws, or (b) in violation of any prohibition against the export or re-export of any part of PGP. PGP already exists outside the US, of course, but I recommend that you not be someone who sends another copy there.

M10
PENTIUM

75MHz→90MHz→100MHz

PENTIUM M10
Eagle System

Featuring: US design technologies M10 Pentium EagleBoard

BASIC CONFIGURATION:

- US design M10 Pentium EagleBoard
- Supports Intel Pentium 75MHz, 90MHz, 100MHz
- PCI Bus Architecture - 4 PCI/4 ISA Slots
- 256K Level 2 - Write Back Cache
- ZIF Microprocessor Socket
- Green PC - Energy Star Compliant
- Two High Speed Serial Ports w/16550 UART
- Enhanced Parallel Port (ECP+EPP)
- Enhanced PCI IDE, Supports MODE 3 IDE
- Specially Tuned BIOS for M10 EagleBoard
- Deluxe Minitower Case w/250W PS
- Enhanced 101 Keyboard

Superfast, specially tuned motherboard with Two year warranty

$399

TRITON PENTIUM M12
Eagle System

Featuring: US design technologies M12 Pentium EagleBoard

BASIC CONFIGURATION:

- US design M12 Pentium EagleBoard
- Supports Intel Pentium 75MHz, 90MHz, 100MHz, 120MHz
- PCI Bus Architecture - 4 PCI/4 ISA Slots
- 256K Level 2 - Write Back Cache
- ZIF Microprocessor Socket
- Green PC - Energy Star Compliant
- Two High Speed Serial Ports w/16550 UART
- Enhanced Parallel Port (ECP+EPP)
- Bus Master PCI IDE, Supports MODE 4 IDE
- Specially Tuned BIOS for M12 EagleBoard
- Deluxe Minitower Case w/250W PS
- Enhanced 101 Keyboard

Superfast, specially tuned motherboard with Two year warranty

$499

M6

66MHz→80MHz→100MHz

M6 486DX4 Eagle System

Featuring: US design technologies M6 Pentium EagleBoard

Superfast, specially tuned motherboard with Two year warranty

BASIC CONFIGURATION:

- US design M6 486DX2/DX4 EagleBoard
- Supports 486 66MHz, 80MHz, 100MHz & Pentium P24T
- Vesa Local Bus - 3 VLB/5 16bit Slots
- 256K Level 2 - Write Back Cache Upgradable to 512K
- ZIF Microprocessor Socket
- 3.3 Volt/5 Volt Autotransformer Circuitry
- Supports Intel, AMD, Cyrix CPU's
- Two Year Motherboard Warranty
- Deluxe Minitower Case w/250W PS
- Enhanced 101 Keyboard

$199

Options for M12/M10/M6 Systems

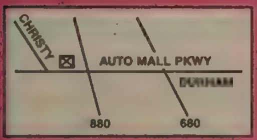
HARD DRIVE

540MB	$169
730	$229
850MB	$249

CD ROM

DOUBLE SPEED	$99
QUAD SPEED	$169

Please call for Complete Options List



newriver computers

43102 Christy Street, Fremont, CA 94538
510-623-9125 FAX: 510-623-9145
EMAIL: NURIVER @ AOL.COM

VISA

Price & Availability subject to change without notice.
No surcharge for credit cards.
Not responsible for typographical errors.
All items brand new with manufacturer's warranty.

MasterCard

When you're done with your copy of
MICROTIMES
PLEASE RECYCLE IT!
Your Children will love you for iT.

Pretty Good Privacy

continued from page 122

Understanding Public-Key Encryption Systems

Public-key encryption represent a breakthrough technology that makes privacy on computer networks extremely simple to achieve, even when there are no "secure lines" you can trust.

In a private, or single-key encryption system, the same key is used to encode and decode a file. Remember your Captain Video Decoder Ring? It was a primitive private-key system. You'd encode your secret message, such as "Drink Your Ovaltine," by replacing the letters of the alphabet with substitute letters from a certain number of places away. For example, let's say we decide to use the key "+4." That would mean we'd switch each letter in our message with the letter that comes four places later in the alphabet. D would become H, R would become V, and so on.

You—or anyone else who knows the key—can easily switch the H back to a D, the V back to an R, and figure out what we're drinking.

Clearly, then, the single key in a one-key system must itself be kept very secret, while somehow still being transmitted to the person receiving encoded files. Even if the key is transmitted safely, which you can never know for certain, the recipient can never be sure received messages haven't been intercepted by the enemy, altered, and passed along to create havoc and disarray.

But with a public-key system, these problems disappear. A public-key system uses one key to encode a file, and another to decode it. Once you have encoded a file, the same key won't decode it again. Only the other one of the two-key pair will do that.

This means you can freely make one key known to the entire world. This key—your public key—is available for use by anyone who wants to send you a file. But once the file is encoded using your public key, only your second key—your private key—will decode it.

So in practice, I can use your public key to encode a file and send it to you. You can then use your private key to read it. Then you can use my public key to encode your reply before you send it to me, and I can use my private key to decode that.

Even better, I can encode each message twice. First, I can use my private key to encode virtually all of the message once, except for a few lines saying who I am. Then I can encode the complete file a second time using your public key—so you will be the only one able to read it. Now when you get the file and decode it with your private key, the important part remains encoded. But my public key will easily decode that part—offering you positive proof that I sent you the message and it hasn't been tampered with.

Despite all these precautions, it's probably true that the CIA or anyone else with massive resources, multiple supercomputers and top-quality code-breaking experts can still decode any message you protect by PGP. But it's unlikely that your message will be all that important when it's finally fully decoded—ten or twenty years from now!

GT COMPUTER

grand opening sale!!

10% OFF ON ALL CD TITLES
3% OFF ON SYSTEMS

486 VLB SYSTEMS

- INTEL CPU
- 256K CACHE
- 4 MB RAM 70NS
- 420 MB IDE HARD DRIVE
- 1.44 TEAC FLOPPY DRIVE
- IDE VLB 2HD/2FD W/2S/1P
- VLB SVGA W/1 MB
- 14" SVGA MONITOR .28 NI
- 101 KEYBOARD
- BABY TOWER CASE
- MS COMPATIBLE MOUSE

DX2-66 . . . . . $1099
DX4-100 . . . . $1199

PENTIUM PCI SYSTEMS

- 256K CACHE
- 8 MB RAM 70NS
- 540 MB IDE HARD DRIVE
- 1.44 TEAC FLOPPY DRIVE
- IDE PCI 2HD/2FD W2S/1P
- PCI SVGA W/1 MB
- 14" SVGA MONITOR .28 NI
- 101 KEYBOARD
- BABY TOWER CASE
- MS COMPATIBLE MOUSE
- COOLING FAN

PENTIUM
60 MHZ $1499
PENTIUM
90 MHZ $1999

CD SOFTWARE

ALIEN LOGIC OEM	$19
ARTHUR'S BIRTHDAY	.35
BLOWN AWAY OEM	.20
BEST OF CICA	.14
COMPTON'S ENCY. INT ACT 95	.29
COREL GALLERY	.34
DICTIONARY OF LIVING WORLD	.11
DOCTOR LINUX	.27
EMTOMBED 3D GAMES	.37
MS ENCARTA ENCY 95 OEM	.39
FAMILY DOCTOR III MPC	.17
HOME REPAIR ENCYCLOPEDIA	.29
HOW THINGS WORK	.29
INFO MAGIC: BSDISK	.18
INTERNET ACCESS 95	.17
LINUX 2.0 TOOLKIT 2CD	.18
MAYO CLINIC: PHARMACIST OEM	.19
NIGHT OWL V.13/V.14/V.15	.16/19/22
OCEAN BELOW	.12
QRZ: HAM RADIO	.13
RISE OF THE ROBOTS OEM	.23
SIMITEL MS DOS 2CD	.13
SOURCE CODE FOR UNIX	.18
OVER 400 CD TITLES & 200 ADULT CDS TITLES IN STOCK	PLEASE CALL

CD DRIVES

CHINON	
CDS-535 220MS DBL SPD SCSI INT	$198
MITSUMI	
FX 400 230MS IDE 4SPD INT	.188
SONY	
CDR-55E DBL SPD IDE INT	.118
CDR-55S DBL SPD SCSI INT	.188
TOSHIBA	
350B 150MS SCSI INT	.285

SOUND CARD

SOUND BLASTER 16 VALUE EDIT	$95
SOUND BLASTER 16 MCD	.125
SOUND BLASTER 16 SCSI	.157
CD CADDY	.4.99
SPEAKERS:	
ACTIVE 75 HI-FI	.48
ACTIVE SP 690	.34
CP-18 2.5W	.19

CASES

BABY TOWER CASE W/200W	$57
MID TOWER CASE W/230W	.73
FULL TOWER CASE W/250W	.117
MID TOWER CASE W/250W SIDE DOOR	.77
ONE HALF HT 5.25 OR 3.5 SCSI EXT	.64

CONTROLLERS

ADAPTEC	
1515 16 BIT W/KITS	$88
1522A SCSI-2 W. OR W/O KITS	.84/143
1542CF SCSI 10MB/S OR W/O KIT	.174/237
PROMISE	
EDIE 2300 IDE 4HD/2S/1P/16550	.58
OTHER	
IDE W/ I/O 2S/1P VLB	.29

FUTURE DOMAIN, VITEX, PLEASE CALL

DISK DRIVES

CONNER	
CFS-420A 420 MB 14MS IDE	$169
CFS-540A 540 MB 14MS IDE	.188
CFA-1080S 1.08 GB 11MS 256K SCSI2	.515
MAXTOR	
MXT-7546A 540 MB 12MS 256K IDE	.198
MXT-71260A 1.2 GB 12MS 256K IDE	.414
SEAGATE	
ST-3660A 540 MB 14MS 128K IDE	.194
ST-31230N 1.05 GB 9MS 512K SCSI-2	.555
TEAC	
1.2 MB 5.25 FLOPPY DRIVE	.45
1.44 MB 3.5 FLOPPY DRIVE	.40

I/O CARDS

KOWELL	
AT I/O (2S/1P) I/O (2S/2P)	$22/27
SIIG	
2S/1P W/16550	.44
BSTB 4-COM	
4 SERIAL W/16550 IRQ 2,3,4,5,10,11,12,15	.108

KEYBOARDS

KEYTRONIC 101	$34
MAXI 101	.34
MITSUMI 101	.28
SIIG MINITOUCH	.44

MEMORY

SIMM	
4X9-60/70 NS	$40/39
1X36-60/70NS	.172/162

COMPUTER/ NOTEBOOK
(3RD PARTY)
AST, COMPAQ, IBM, MAC, TOSHIBA, TI, NEC
LASER PRINTER (3RD PARTY)
EPSON, HP, TI, PANASONIC
PLEASE CALL FOR BEST PRICES

FAX MODEM

MEGAHERTZ	
PCMCIA XJ1144 FAX MODEM MNP5	$185
US ROBOTICS	
PCMCIA 14.4 F/MODEM SPORTSTER	.185
ZOOM	
14.4/14.4 FAX MODEM W/VOICE INT	.138
OTHER	
14.4/14.4 FAX MODEM INT	.59

MOTHERBOARDS

AIR	
486DX2-66 256K 3VLB W AT I/O	$185
PENTIUM-90 ISA VLB/PCI W I/O	.375
ASUS	
486DX2-66 256K VLB	.135
LYNN	
486DX4-100 256K VLB/PCI	.132
486-33/66 256K VLB GREEN PC	.157
MICRONICS	
486-33/66 256K VLB	.178
JX3WB 486-33/66 256K VLB	.255
M54PI PENTIUM-90 W/IDE I/O PCI NEPTUNE	.410
NICE	
486-33/66 3 VLB GREEN PC	.138
SUPER	
P54CI PENTIUM-90/100 256K PCI/VLB	.295

MOUSE

MICROSOFT	
SERIAL 2.0 OEM GRAY/WHITE	$28/34
DEXXA SERIAL	.19

NETWORKING

3COM	
3C503 ETHERNET II 16 B COAX/TP	$163/173
3C509 ETHERLINK III 16 COAX/TP	.116/113
3C509 ETHERLINK III 16 COMBO	.128
ADDITRON	
AE200LC BNC&TP	.47
UTP8/L 8 PORT HUB (8TP+BNC+AUI)	.147
UTP16/L 16 PORT HUB (16TP+BNC+AUI)	.282
LANPRO	
2000JC 16 BIT BNC/2000JT 16 B TP	.38
2000RAL 16 BIT COMBO	.44
HUB ER5390 8 PORT (9TP+BNC)	.147
HUB 5396 16 PORT (17TP+2BNC+2AUI)	.263
PER N'L NETWARE COAX STARTER KIT	.137
MICRODYNE	
NE2000+COAX/TP/COMBO	.79/69/85
SMC	
ELITE ULTRA 16 COAX/TP/COMBO	.108/107/118

POWER SUPPLY

AMERICAN POWER CONVERSION	
APC-400 SMART UPS (386WS)	$287
APC-600 SMART UPS (386-486 FS)	.357
APC-900 SMART UPS (386-486, FS-WS)	.513
KINGSPAO	
250W BABY/MID TOWER	.43
250W/300W FULL TOWER	.47/67

SCANNERS

HP (FLATBED)	
SCANJET 2CX COLOR W/KIT	$925
TAMARACK (FLATBED)	
ARTI SCAN 24 BIT, COLOR, 256 GRAY LEVEL SCSI FOR PC OR MAC W/PHOTOSHOP & OCR 600/800/1200 DPI	.483/583/697
W/PHOTOSHOP 3.0 600/800/1200 DPI	.633/733/853
SLIDE SCAN KIT (TRANSPARENCY)	
600/800/1200 DPI	.523/523/593

TAPE BACK-UP

COLORADO	
DJ20 250 MB QIC-80 INT	$139
TRACKKER 250 MB EXT	.283
DC2120 PREFORMAT TAPE	.13
CONNER	
TAPE STOR 420 MB w/CARTRIDGE INT	.167

VGA CARDS

ATI	
GRAPHICS EXPRESSION 2 MB PCI	$215
GRAPHICS ULTRA PRO 2 MB VRAM VLB	.263
DIAMOND	
STEALTH 32 2 MB PCI	.183
STEALTH 64 2 MB PCI/VLB	.195/195
ORCHID	
KELVIN 64 1 MB PCI/VLB/ISA	.137
KELVIN 64 2 MB PCI/VLB	.187

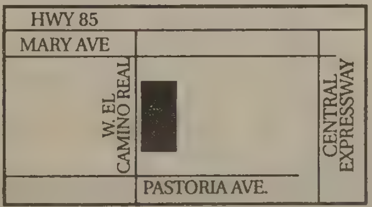
MONITORS

KFC	
CT1428A 14" 1028X768 .28 NI	$245
CA1508 15" FLAT 1280X1024 .28NI	.387
MITAC	
M1564 15" 1280X1024 .28 NI	.325
SONY	
15SF 1280X1024 .25 NI	.427
VIEWSONIC	
6E 14" 1024X768 .28 NI	.273
15SE 15" 1024X768 .28 NI	.343

GT COMPUTER

903 W. EL CAMINO REAL
SUNNYVALE, CA 94087
TEL: (408) 735-7887
FAX: (408) 735-8028

OPEN 7 DAYS A WEEK
MON-FRI: 9AM-7:30PM
SAT-SUN: 10AM-6PM



**No Surcharge For VISA, MC, DISCOVER*
**Price Subject to Change w/o Notice & Subject to Stock on Hand*
**Not Responsible For Typographical Errors*
**No Refunds After 30 Days*

BASE SYSTMES
Custom-Build to your needs

4-80

- **Quake Series DX2/80MHz**
- **256K Cache (exp. up to 1Meg)**
- Quake Series Tower (220W UL PS)
- 0MB (exp. to 64MB RAM uses 72-Pin Simms)
- AMI Bios
- OptiChip Set
- ZIF Socket
- **Integrated Hi-Speed Serial, Parallel Floppy & PCI Enhanced IDE**
- **Supports 4-IDE Hard Drive**
- Teac 1.44MB Floppy Drive
- Mitsumi 101 Keyboard

$499

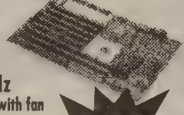
P-90

- **Quake Series Pentium 90MHz**
- **Intel Plato Motherboard w/ CPU and fan**
- Quake Series Tower
- 250 Watt UL Listed PS
- 0 exp. to 128MB RAM, uses 72 pin simms
- AMI Flash Bios
- **PCI**
- **Integrated Hi-Speed Serial, Parallel Floppy & PCI Enhanced IDE**
- Neptune Chipset
- Uses 72-Pin SIMMs
- Teac 1.44MB Floppy Drive
- Keytronic 101 Keyboard

$1499

Call or Fax For Your Personalized Quote!

MOTHERBOARDS



INTEL PLATO 90MHz
- 90MHz Pentium CPU with fan
- Ami Flash Bios
- 256K Cache
- Integrated Hi-Speed Serial, Parallel Floppy & PCI Enhanced IDE

$949

INTEL PLATO 100MHz
- 90MHz Pentium CPU with fan
- Ami Flash Bios
- 256K Cache
- Integrated Hi-Speed Serial, Parallel Floppy & PCI Enhanced IDE

$1199

INTEL ZAPPA 75/90/100MHz
Featuring Triton Chipset (w/o CPU)
- Integrated Hi-Speed Serial, Parallel Floppy & PCI Enhanced IDE

$349

ASUS

Dual Pentium Processor Mainboard PCI/EISA

90/100 MHz	$649
PCI/ISA	$409
586 Mainboard 90/100	
Featuring Triton Chipset/EDO	**$299**
With Power Burst	**$379**

Other Boards Available:

EDO MEMORY .... CALL

Alaris Elite Group American Megatrends IBM

HARD DRIVES

Seagate

IDE & ENHANCED IDE DRIVES

170MB	ST3195A	16ms	3.5"x1"	$145
210MB	ST3243A	12ms	3.5"x1"	$159
341MB	ST3391A	12ms	3.5"x1"	$228
428MB	ST3491A	12ms	3.5"x1"	$248
1.0GB	**ST31220A**	14ms	E-IDE	$478

FAST SCSI-2 DRIVES

				Internal	External
545MB	ST3655N	12ms	3.5"x1"	$375	$475
1.0GB	**ST31230N**	**10ms**	**3.5"x1"**	**$549**	**$649**
1.0GB	ST31200N	9ms	3.5"x1"	$Call	$Call
2.1GB	ST12400N	9ms	3.5"	$939	$1039
2.1GB	ST32430N	10ms	3.5"x1"	$999	$1099
2.1GB	**ST32550N**	**8ms**	**3.5"x1"**	**$1099**	**$1199**
4.1GB	ST15150N	8ms	3.5"	$1729	$1829
4.3GB	ST15230N	9ms	3.5"	$1499	$1599
9.0GB	**ST410800N**	11.5ms	5.25"	**$3199**	**$3399**

WESTERN DIGITAL

E-IDE DRIVES

420MB	WDAC2420	13ms	3.5"X1"	$189
540MB	WDAC2540	12ms	3.5"X1"	$219
730MB	WDAC2700	10ms	3.5"X1"	$269
850MB	WDAC2850	<10ms	3.5"X1"	$279
1.0GB	WDAC31000	<10ms	3.5"X1"	$379
1.28GB	WDAC31200	<10ms	***NEW***	**$389**

CONNER

IDE & ENHANCED IDE DRIVES

420MB	CFS420A	14ms	3.5"X1"	$179
540MB	CFS540A	15ms	3.5"X1"	$195
850MB	CFS850A	12ms	3.5"X1"	$268
1.27GB	CFS1275A	<12ms	3.5"X1"	$389

FAST SCSI-2 DRIVES

				Internal	External
1.0GB	CFP1080S	10ms	3.5"X1"	$499	$599
2.1GB	CFP2105S	<9ms	5400RPM	$949	$1049
2.1GB	CFP2107S	<9ms	7200RPM	$1069	$1169
4.2GB	CFP4207S	<9ms	7200RPM	$1799	$1899

Maxtor

IDE & ENHANCED IDE DRIVES

420MB	7420AV	12ms	3.5"x1"	$185
540MB	7540AV	12ms	3.5"x1"	$209
546MB	7546A	E-IDE	3.5"x1"	$239
850MB	7850AV	12ms	3.5"x1"	$269
1.2GB	71260A	E-IDE	3.5"x1"	$399
SCSI				
345MB	7345S	SCSI	3.5"x1"	$179

HEWLETT PACKARD

FAST SCSI-2 DRIVES

				Internal	External
2.1GB	HPC2490	8.9ms	3.5"	$1029	$1129

IBM

IDE DRIVES

728MB	70G8850	12ms	3.5"x1"	$279
1.0GB	94G3183	12ms	3.5"x1"	$459

FAST SCSI-2 DRIVES

				Internal External
540MB	94G2646	12ms	3.5"x1"	$238/$338
728MB	94G2647	12ms	3.5"x1"	$279/$379
1.0GB	94G3184	10.5ms	3.5"x1"	$519/$619
2.0GB	70G8493	9.2ms	3.5"	$979/$1079
4.0GB	90F0780	9.4ms	5.25	$1979/$2239

FUJITSU

IDE/SCSI DRIVES

				Internal External
530MB	M2684TAU	IDE	12ms	$199
530MB	M2684SAU	SCSI	12ms	$219/319
1.05GB	M1606	SCSI	10ms	$549/649
2.1GB	M2915S	SCSI	8.9ms	$Call/Call

HARD DRIVES

Quantum™

Maverick

540MB	QM30540MVS	14ms	3.5x1"	$229/339

LIGHTNING

540MB	QM30540LTA	IDE	11MS	3.5X1"	$229
730MB	QM30730LTA	IDE	11MS	3.5X1"	$269
365MB	QM30365LTS	SCSI	11MS	3.5X1"	$199/299
540MB	QM30540LTS	SCSI	11MS	3.5X1"	$249/349
730MB	QM30730LTS	SCSI	11MS	3.5X1"	$289/389

EMPIRE FAST SCSI-2 SERIES

1.0GB	EMP1080S	9.5ms	3.5"x1"	$Call	$Call
2.1GB	EMP2100S	8.9ms	3.5"	$Call	$Call

CAPELLA

2.2GB	VP32210S	8.5ms	3.5X1"	$1079	$1179

GRAND PRIX

2.1GB	7200RPM	GP32151S	8.6ms	3.5"	$1049/1149
4.3GB	7200RPM	GP34301S	8.6ms	3.5"	$1499/1599

ATLAS

1.0GB	7200RPM	XP31070ALS	8.5ms	3.5"	$Call
2.1GB	7200RPM	XP32150ALS	8.5ms	3.5"	$1019
4.3GB	7200RPM	XP34300ALS	8.5ms	3.5"	$1599

MICROPOLIS

FAST SCSI-2 DRIVES

2.0GB	MC4221	8.5ms	3.5"x1"	$1019	$1119
3.0GB	MC1936	11ms	5.25"	$Call	$Call
4.0GB	MC3243	8.5ms	3.5"	$1549	$1649
9.1GB	MC1991	11ms	5.25"	$2749	$2949

AUDIO VISUAL SCSI-2 DRIVES

3.0GB	MC1936AV	11ms	5.25"	$1299	$1399
4.0GB	MC3243AV	8.5ms	3.5"	$2099	$2199
9.1GB	MC1991AV	11ms	5.25"	$Call	$Call

WIDE SCSI DRIVES

Seagate

				Internal	External
1.0GB	ST31230W	10ms	3.5"	$619	$889
2.1GB	ST32550W	9ms	3.5"X1"	$1329	$1599
4.1GB	ST15150W	8ms	3.5"x1"	$2349	$2599
9.0GB	ST410800WD	11.5ms	5.25"	$3699	$N/A

MICROPOLIS

4221W	2.0GB	Wide Single-ended	$1099
3243W	4.0GB	Wide Single-ended	$1599
1991W	9.1GB	Wide Single-ended	$2649

CONNER

				Internal	External
2.1GB	CFP2105W	<9ms	3.5X1"	$1049	$1319

IBM

				Internal	External
1.0GB	45G9486	8.6ms	3.5"x1"	$679	$959
2.0GB	70G8494	<9ms	3.5"	$1199	$1459

FUJITSU Allegro Series

2.1GB	M2903SW	9.6ms	3.5"	$CALL
2.1GB	M2915SW	8.9ms	3.5"	$CALL
3.1GB	M2909SW	9.6ms	3.5"	$CALL

NOTEBOOK HARD DIRVES

Quantum™

2.5" IDE & SCSI NOTEBOOK DRIVES

256MB	QM20265DYA	17ms	2.5"	IDE	$249
256MB	QM20265DYS	17ms	2.5"	SCSI	$259
314MB	QM20341DYA/S	17ms	2.5"	IDE/SCSI	$319/325
514MB	QM20541DYA/S	17ms	2.5"	IDE/SCSI	$419/429

Seagate

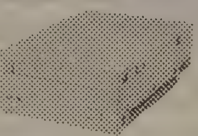
2.5"IDE NOTEBOOK DRIVES

209MB	ST9235AG	16ms	2.5"	$339
340MB	ST9385AG	16ms	2.5"	$469
540MB	ST9655AG	15ms	2.5"	$529

TOSHIBA

528MB	MK2526FC	13ms	IDE	$389
810MB	MK2628FC	13ms	IDE	$599

TAPE BACK-UP DRIVES



HEWLETT PACKARD

MOST RELIABLE SCSI TAPE BACKUP
FOR MAC, PC OR SUN
TAPE BACKUP - DAT

2.0GB (35470)	$789	$879
4-8GB (35480)	$889	$989
4-16GB (C1533A) DDS-2	$1099	$1199
90 M 4MM DAT CARTS 1/5PAK	$13	$60

EXABYTE®

4200Ci - Kit 4GB Tape Backup
- 4GB Tape Drive
- 28MB/Min Transfer Rate
- 16-Bit SCSI Controller
- DOS & Win Backup Software
- One Data Cart
- 48-Hr Replacement Warr

$949

	Internal/External
EXB-4200Ci - External Kit	$1039
EXB-2501 1GB 567KB/Sec	499/629
EXB-2501 - Kit	$649/749
EXB-FS400DC 2-4GB Data Comp.	$1239/1499
EXB-8205XL 4-7GB 32MB/Min w/Comp.	$1299/1599
EXB-8505XLi 7-14MB 60MB/Min W/Comp	$2069/2329

CONNER ARCHIVE

	Internal	External
VIPER SERIES		
250MB: 6MB/Min. (2150S)	$319	$399
525MB: 6MB/MIN.(2525S)	$459	$559
PYTHON SERIES DAT 4mm		
2.0GB: 11MB/Min. (4320)	$799	$899
4GB: 1MB Cache,(4324 Turbo)	$829	$939
4-8GB: EXT W/COMP (4352XP)	N/A	$1079
Other Models Available	Please Call	

CONNER SOF•STOR
FULL LINE AVAILABLE

WangDAT™

	Internal/External
3100 2GB 4mm DAT SCSI	$759/859
3200 4-8GB 4mm DAT SCSI	$879/979
3400DX 4-8GB 4mm DDS-2 SCSI	$999/1099

WANGTEK

1/4" TAPE BACK-UP (SCSI)	Internal/External
5150ES 250MB	$329/419
5525ES 5255MB	$459/559
5100HT 1.2GB	$619/719
9500DC 5-10GB	$1149 /1249
NEW 1/2" MINI-CATRIDGE (RUNS OFF FLOPPY)	
3010MT 340-700MB	$259
3020MT 680-1.4GB	$Call

COLORADO™ MEMORY SYSTEMS INC.

INTERNAL: RUNS OFF FLOPPY PORT

250MB (DJ20 Jumbo 250)	$139
350MB (DJ35C JUMBO 350)	$179
700MB (DJ25 JUMBO 700)	$269

Trakker

EXTERNAL: RUNS OFF PRINTER PORT

250MB (Trakker 250) JT20	$319
350MB (Trakker 350) JT35	$349
700MB (Trakker 700) JT25	$419

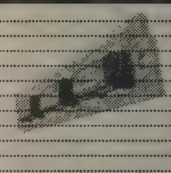
SCSI CONTROLLERS

adaptec

AMM-1570	Full SCSI w/ Advanced Audio	$255
1522	16-Bit ISA 7HD/2FD KIT	$135
1520	16-Bit ISA WITH BIOS CARD ONLY	$99
1542CFK	16-Bit BusMaster Complete KIT	$235
1542CF	16-Bit ISA FAST SCSI-2 CARD ONLY	$199
1640	32-Bit MicroChannel forPS/2,7HD KIT	$299
2742T	32-Bit EISA KIT, 14HDs	$349
2742WK	32-Bit WIDE EISA KIT w/WIDE CABLE	$379
2825VL	32-Bit E-IDE/SCSI-2 KIT	$169
2842A-VL	32-Bit Fast SCSI-2 VLB KIT	$259
APA-460	Slim SCSI PCMCIA KIT	$269
APA-4510	PCMCIA CARD READER	$199
2940K	32-Bit PCI SCSI-2 KIT RISC-BASED I/O	$279
2940WK	32-Bit PCI WideKIT w/ WIDE CABLE	$369
3940	DUAL CHANNEL PCI CONTROLLER KIT	$409
T130	8-Bit Trantor w/BIOS & SW Drivers	$69
APA-T348	Parallel to SCSI Plus 250kb/s	$125
APA-T358	Parallel to SCSI EPP 1MB/S	$159

BUSLOGIC FUTURE DOMAIN Full Line Available

MEMORY/CPU'S



1MBX3/60-70ns	$Call
1MBX9/60-70ns	$Call
1MBX8/60-70ns	$Call
4MBX9/60-70ns	$Call
4MBX3/60-70ns	$Call
1X36/60-70ns	$Call
1X32/60-70ns	$Call
2X36/60-70ns	$Call
2X32/60-70ns	$Call
4X36/60-70ns	$Call
4X32/60-70ns	$Call

Full line of notebook memory available.

intel. AMD Cyrix

Intel 486 DX33/2 -50/2-66/4-100	$Call
Intel 586 Pentium 60/66/75/90/100	$Call
AMD 486 DX2-50/2-66/2-80/4-100	$Call
Cyrix DX/2 -66	$Call

REMOVABLE DRIVES

SyQuest

REMOVABLE CARTRIDGE DRIVES

44MB INT / EXT (SQ555) W/cart	**$235 $349**
88MB C internal (SQ5110C)	$245
88MB C external w/cart. & cables	$369
105MB internal IDE (SQ3105A)	$179
105MB internal SCSI (SQ3105S)	$239
105MB external SCSI w/cart	$349
270MB INTERNAL	**$349**
270MB EXT. FOR PC OR MACINTOSH w/cart	**$469**
200MB (5200) Internal	$379
200MB External w/Cartridge	$529

Maxoptix

1-Gbyte & 1.3Gbyte Rewritable OpticalDrives

Tahiti IIIM 1MB Cache buffer	Int./Ext.	$1979/2169
Tahiti IIIM 4MB Cache buffer	Int./Ext.	$2149/2349
1.0/1.3GB cartridge glass/poly-512 or 1024kb Sector		$135/$169

HEWLETT PACKARD

1.3Gbyte Rewritable Optical Drives

1.3 GB (C1716 T)	$2025	$2599
1.3GB OR 650 MB cartridge		$125
20GB (C1100A) Ext Juke Box (M-20XT)		$4600

FUJITSU FULL LINE AVAILABLE

RICOH

128MB, 3.5" Rewritable Optical Drives

Internal 128MB (RO 3012 E)	$479
External 128MB W/ CART(EXT3012)	$629

1.3GB, 5.25" HHRewritable Optical Drives

Internal 1.3GB (RO 5061)	$1699
External 1.3GB (EXT 5061)	$1999

IBM OPTICAL DRIVES

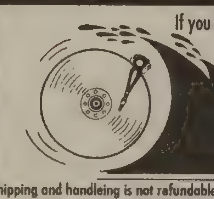
127MB, 3.5" Rewritable Optical Drives

Internal 127MB	$729
External 127MB	$889

1.3GB, 5.25" Rewritable Optical Drives

Internal 1.3GB	$2199
External 1.3GB	$2699

If you don't see it here or if you see it for less, give us a chance to earn you business.

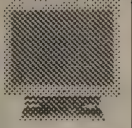


Pacific Computer Products

A Division of Quake International Corporation

Shipping and handleing is not refundable some items are subjects to restocking fee depending upon manufacturer.

MONITORS



MAG INNOVISION

DX 15F-1 15" .28 dpi	$358
DX 17F 17" .26 dpi	$659
MXP 17F 17" .26 dpi flat screen	$939
MXP 21F 21" .28 dpi flat screen	$1769

ViewSonic®

ViewSonic-15	
V6E	$289
V15PS	$428
ViewSonic-15G 1024x768	$389
ViewSonic-17 17" SVGA, .28dpi, 1280X1024@76Hz,	$869
V17E	$719
ViewSonic-17G 1280X1024	$739
V20PS	$1489
V20G	$1319
V21PS	$1769

NOKIA
CONSUMER ELECTRONICS

447X-058 17"	$999
447X-059 W/ TCO 17"	$1139
447L-058 (Multimedia) 17"	$685
447L-058 (red, blue, green, charcoal) 17"	$685
445X-058 21"	$2239
445X-059 w/ TCO 21"	$2499

SONY

CPD-15SF-1	$438
CPD-17SF-1	$889
GDM-17SE-1	$Call
GDM-20SE-1/P	$1939

NEC

XV14		$Call
XV15		$449
XV17		$Call
XE15	15" 1024X768/.28mm	$558
XE17	17" 1024X768/.28mm flat screen	$989
XE21	21" 1280X1024/.28mm	$1299
XP15	15" 1024X768/.28mm opticlear	$669
XP17	17" 1280X1024/.28mm opticlear	$1999
XP21	21" 1600X1200/.28mm opticlear	$Call

HITACHI®

NS1586-515 15" .28 dpi	$399
NS 1764 17" .26 dpi	$739
CM 1797 17" .26 dpi	$959
CM 2096-511 20" .31 dpi	$1259
CM 2198-513 21" .28 dpi	$1869
CM 2198-514 21" .28 dpi	$1759
CM 2199-511 21" .26 dpi	$2459
CM 2199-512 21" .28 dpi	$2119

FLATBED SCANNERS

Relisys

AVÉC Colour 2400 for PC or MAC

PC Version Includes:
- OmniScan
- Twain Driver
- SCSI Cable
- Terminator
- Powercord

$449

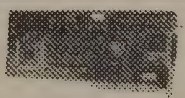
MAC Version Includes:
- Adobe Photoshop™ LE
- Art Scan
- SCSI Cable
- Terminator
- Powercord

$449

AVÉC Colour Reli 4816 for PC or MAC
- One pass color scanner
- 4800 dpi
- 16 Million colors
- 256 Shades of gray
- ColdScan Technology
- SCSI-2 Interface

$939

VIDEO CARDS



DIAMOND

SpeedStar Pro SE 1MB VLB/PCI 1MB	$109
SpeedStar Pro ISA 1MB	$99
Stealth 64 DRAM VLB/PCI 1MB/2MB	$139/188
Stealth 64 DRAM VLB/PCI 1MB/2MB	$Call
SpeedStar 64 1MB ISA/PCI	$139
SpeedStar 64 2MB iSA	$199
Viper SE 2MB/4MB VLB/PCI	$Call
Viper Pro 2MB/4MB VLB/PCI	$Call

Number Nine
Computer Corporation
Excellence in PC Graphics

9GXe Level World's Fastest Graphics Engine 86C928

GXe 64 1MB / 2MB PCI or VLB	$179/248
9GXE 64 Pro PCI or VLB 2MB/4MB	$349/$519
9GXE 64 Pro 1600 2MB/4MB VLB/PCI	$529/689
IMAGINE 128 4MB PCI	$819
IMAGINE 128 1600 4MB PCI	$1048

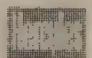
ATi

Graphics Xpression 1MB/2MB PCI/ISA	$169/219
WinTurbo 2MB VLB/PCI/ISA	$289
Graphics Wonder VLB/ISA	$119
Graphics Ultra Pro Turbo 2MB/4MB VLB/PCI/ISA	$369/579
GraphicsUltra Pro 2MB VLB/PCI/ISA	$269

matrox Video Cards

MGA Imp/LTE 2MB PCI/VLB	$319
MGA Imp+ P PCI 2MB	$389
MGA Imp+ P PCI 220	$479
MGA Imp+ A ISA	$419
MGA Imp+ A220 ISA	$519
MGA Imp+ 2MB Upgrade ISA/PCI	$229

Full line available.



D301	Dynamite Pro 1MB DRAM ISA Bus	$149
D302	Dynamite Pro 2MB DRAM ISA Bus	$189
D701		$149
D902	Dynamite Pro PCI 2MB	$239
GT2020	2M	$329
GT2220	2M PCI	$329
GT2040	4M	$469
GT2240	4M PCI	$469

SVGA Video Card

SVGA 256K ISA video card	$28
SVGA 512K 1024X768	$39
SVGA 1024K 1024X768	$59
SVGA VESA Local Bus	$69
SVGA PCI Bus	$Call

COMMUNICATION DEVICES

AirNote

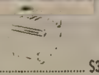
THE COMPLETE MESSAGING SOLUTION
- * Operator Assisted Message
- E-Mail Access
- SendNote Software
- Internet Gateway
- Optional Voice Mail
- Lifetime guarantee*

monthly fees start at $19.95*

* for airnote subscribers/call for more information.

NOTEBOOK HARD DIRVES

brother



HL-630 6ppm 512KB 300X300 dpi	$399
HL-645 6ppm 1MB 300X300 dpi	$469
HL-655 6ppm 2MB 300X300 dpi	$599
HL-660 6ppm 2MB 600X600 dpi	$699
HL-1260 12ppm 2MB 600X600 dpi	$1299

Canon EPSON
Call for pricing.

CD-ROMS

TOSHIBA

®256K Cache Buffer®Free Caddy
®MultiSession PhotoCD XA,MPC2Compliant

	INT/EXT
XM3501B Quad-Speed120ms/600kb	$Call/Call
XM3601B Quad-Speed SCSI/Caddyless	$299/$389
XM5302 IDE Quad Speed	$189

PLEXTOR

4PLEX *Lightning Fast* Quad SpeedCD-ROMs
- 125/150ms Random seek
- 600kb/secDataTransferRate
- 256k/1MBache Buffer
- MultPlatform-PC,Mac,UNIX
- SCSI2Compliant,CD-I,VideoCDPhotoCD
- 2 Year factroy Warranty
- Capable of DigitalAudio Extraction,CD+G,CD+MIDI

PX-43CS	Internal 4-Speed, 256K Cache	$339
PX-45CS	External-Speed, 256K Cache	$499
PX-43CH	Internal 4-Speed, 1MB Cache	$399
PX-45CH	External-Speed, 1MB Cache	$529

NEW Plexor Six Speed 6PLEX
- 145ms Random Access Time
- 900Kb/Data Transfer
- 100K Hour MTBF

$569

PIONEER®

THE HIGH SPEED CD-ROM MINI-CHANGER
- External SCSI-2 Subsystem 6 or 18 Disc Minichanger
- Multisession,MPC,XA,CD-Audio,ISO9660,HS,RR
- DOS,Mac,OS/2,WIN,VMS,Sun OS,Solaris & UNIX support
- 2048/512 Byte Selectable For Workstations
- Large capacity look-ahead function (256kBytes)
- 300ms/100~240V, 50-60Hz/20,000 hr. MTBF
- Includes S/W for DOS/WIN & Mac and CD Magazine

DRM-604X 6-Disc4X QUADRASPIN 614kb/sec	$799
DRM-1804X18-Disc4X QUADRASPIN 614kb/sec	$1849

NEW! •SINGLE DISC QUADRASPIN

	Internal/External
DR-U104X 240ms-614kb/sec-256K	$349/$449
DRM-A600 6 CD MAGAZINE	$29

NEC

CDR401/401K 3x portable	$389/469
CDR-501/501K 4X internal	$388/479
CDR-601/601K 4X external	$489/599

•Kit includes 16 bit card w/ sw and Microsoft Encarta.

TEAC

CD-55A SUPERQUAD 4X CD-Rom with Interface
- 600Kb/sec Transfer Rate
- 195ms Access Time
- Sound Blaster Compatible
- Multisession PhotoCD,CD-DA,XA,MPC2 Support
- Complete Plug&Play Kit w/cables and software

$219

CD-55A SuperQuad 4X AT KIT	$219
CD-55AB SuperQuad 4X AT Bare Drive	$189

PHILIPS 2X CD-Rom IDE Interface $95

SONY CDU 55E/55S .. $Call

MEDIA VISION
Jazz 16 Sound Card (OEM)
On-Board SCSI or Atapi
•While Supplies Last•

$49

Sanyo
•Quad Speed 4X SCSI $199/299
•OEM While Supplies Last•

DIAMOND MULTIMEDIA **CREATIVE** CREATIVE LABS, INC

COMPLETE MULTIMEDIA KITS AVAILABLE...CALL

Get Warped with OS/2

Let Pacific Computer Products Build a Preloaded OS/2 Compatible Computer for you.

OS/2 Warp Boot Manager with Bonus Pack fully pre-loaded including the InterNet Access kit, CIM, PIM and Phone Book, IBM Works (Word Processor, Spreadsheet, Database, and ChartMaker), Multimedia Viewer (with the Bonus pics, movies and Photo-CD images already referenced!) plus FaxWorks Lite, all the Sound Blaster toys, and more!

FAX/MODEMS

USRobotics

14.4 INT/EXT for PC,V.32&V.42/MNP2-4/5	$99/$119
14.4 Mac & Fax, for Macintosh	$139
14.4 PCMCIA 2.1 Fax/Modem V.32bis w/V.42	$199
28.8 INT/EXT for PC,V.34&V.FC,MNP2-4/5	$219/$239
28.8 PCMCIA 2.1Fax/Modem V.34,V.FC & V.42	$349

28.8 & 14.4,14.4LC Fax/Modems, up to 115,200bps throughput,Caller ID, Cable & Free Software Included.

14.4	Internal/External for PC	$104/$114
28.8	Internal/External for PC	$179/$199
14.4LC	External for Macintosh W/ SW & Cable	$129
28.8i	Internal for PowerBooks	$299
28.8	External for Macintosh W/ SW & Cable	$249

MEDIA

Floppy Disks, Tapes, Opticals, Blank Recordable CD's

SONY Verbatim Maxell 3M KOMAG RICOH TDK EXABYTE

SyQuest Cartridges

44MB	SQ400	5.25"	$59/$285
88MB	SQ800	5.25"	$79/$375
105MB	SQ310	3.5"	$59/$285
270MB	SQ327	3.5"	$77/$370
200MB	SQ2000	5.25"	$89/$435

CABLES

HARD DRIVE INTERNAL CABLES

SCSI 50-pin Ribbon 3 Connectors 2 device	$6
SCSI 50-pin Ribbon 4 Connectors 3 devices	$10
SCSI 50-pin Ribbon 5 Connectors 4 devices	$15
SCSI 50-pin Ribbon 6 Connector 5 devices	$15
SCSI 50-pin Ribbon 7 Connectors 6 devices	$18
SCSI 50-pin Ribbon 8 Connector 7 devices	$20
FastWide 68 Pin Ribbon 3-Connector 2-Devices	$35
IDE 40-pin Ribbon 3 Connectors	$4
Floppy & IDE Cables Set	$6

HARD DRIVE EXTERNAL CABLES

Centronics 50 to 50 SCSI-II	$35
Centronics 50 to Mac 25-Pin	$8
Centronics 50 to Centronics	$13
Centronics 50 to Centronics 50 6ft.	$13
Centronics 50 to Centronics 50 3ft.	$10
Centronics to DB-50	$35
DB-50 to SCSI-II	$35
DB-50 to DB-50	$35
SCSI-II to SCSI-II	$35
Fast Wide SCSI-II to Centronics	$85
Wide to Wide 68 pin cable	$85

NETWORKS

3Com Xircom intel. Accton NOVELL SMC

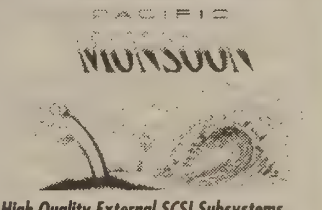
Full Line of Network Products Available, call for pricing.

PORTABLE SOLUTIONS

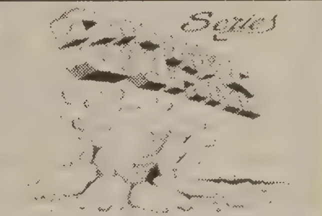
MicroSolutions
Computer Products
backpack

- COMPACT, PORTABLE, EXTERNAL UNIT
- PERFECT FOR NOTEBOOKS AND LAPTOPS
- SIMPLE INSTALLATION
- PLUGS INTO THE PRINTER PORT

Backpack CD-Rom double speed	$299
Backpack CD-Rom quad speed	$359
Backpack 250MB Tape Drive QIC 80	$279
Backpack 900MB Tape Drive QIC 3010	$449
Backpack Hard Drive 420MB	$418
Backpack Hard Drive 850MB	$515
Backpack Hard Drive 1.2GB	$779



High Quality External SCSI Subsystems. Also Available with Wide SCSI Drives & Cables.



Custom-Built to your needs High Quality Brand Name Component. Ask about our pentium Based Systems with Triton Chipset.

• SERVICE

In-House Memory, Hard Drive, and Motherboard Upgrades for PC, Macs, and Laptops. • On-site Service available for our Corporate Customers.

• PRICE

We Offer the lowest prices with the best service

• COMMITMENT

Our Commitment to make the difference. We stand behind our products with a company-wide dedication to service, value, and respect for you, our customer. We believe in long term goals, and look forward to servicing you now and in the future.

• SELECTION

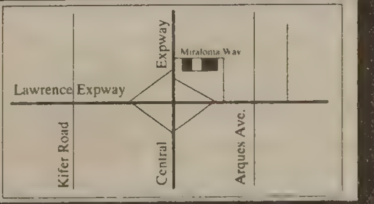
Hard Drives, Controller Cards, Optical, CD-ROMs, Tape Backups, Multimedia, Monitors, Video Cards, Computer Systems, Printers and more...

CORPORATE DEPARTMENT

- Fortune 1000 Companies - Preapproved
- Gov't Agencies - Preapproved
- All Educational Institutions Welcome
- Quantity Dealer Discount Available
- International Order Welcome
- Fax P.O.s and Quotes to (408) 733-9732

PACIFIC COMPUTER PRODUCTS
1180 G Miraloma Way, Sunnyvale, CA 94086
Tel (408) 733-9730 Fax (408) 733-9732
Open Mon-Fri 9am-6pm

MasterCard VISA DISCOVER P.O.s



Springtime At BMUG

System 7.5 Tips And More

By David Morgenstern

My sighs have escalated lately, what with the terrible performance of the local sports teams, scab-ball spring training, and the glowing reports in the know-nothing mainstream press of Microsoft's inhuman and inhumane BOB interface. And to top it all, my daughter is learning how to drive. There's an old saying, "Life is as bitter as bile—but without bile, no one can live." It's all beyond the ken of a mortal BMUGer.

Fortunately, the world seemed a better place to me when late in March, BMUG held its annual MacFest get-together on the UC campus. Thousands of local members mixed with a couple of dozen vendors, interest group specialists, volunteers and the peanut gallery. Many questions were raised and answered in the Helpline booth, during panel discussions and throughout the grueling Stump-the-Helpline quiz session. I've rarely seen so many BMUG T-shirts in one spot—a non-virtual fashion show. Everyone had a gigabyte of a good time.

This month we take a walkabout with the latest Mac systemware updates and pick up some tips to boot—some at boot time, even!

Pomegranates, Figs, And Updates

In March, Apple came out with an update package for System 7.5 that was surprisingly called, the System 7.5 Update. Whoa! Perhaps they should have called it some human name like Betty or Barney. But then they'd be in hot water with Fred Flintstone, Hanna Barbera, and the multinational mega-corporation that owns them.

The update fixes a bunch of bugs, improves performance on older Mac models, and adds a bunch of new features. It also helps keep the system stable when memory gets low and fixes problems that some systems had when pasting large blocks of data.

For most users, System 7.5 is good, but not great unless you add an extra dose of memory—even if you're not running the RAM-hungry extensions, QuickDraw GX, the new cool printing and display architecture, and PowerTalk, the add-on that gives low-level electronic mail and authentication services to your Mac.

Some users moan and groan at the ever-growing RAM requirements of new systemware, extensions, control panels, printer drivers, and applications. You'd better get used to it. Everything takes up more room in RAM, as well as on disk. And it will only get worse as desktop machines get faster and more powerful. You know you love it!

The real minimum usable system RAM is now 12MB. No yelling allowed—it's not that much, especially when compared to the requirements of Windows. This amount of memory lets you use System 7.x, QuickDraw GX, and several handsful of extensions—and a couple of those program-whatchamacallits. Moving up to 20MB is even better, or you can try installing Connectix Corp.'s RAMDoubler that mixes compression, optimization, and virtual memory schemes to boost memory.

Here are some of the things to keep an eye out for in System 7.5:

- **Power Macs.** If you're one of the lucky (and smart) users of a Power Mac, you'll see speedier scrolling and graphic operations with a native QuickDraw. Power Macs run on a RISC (reduced instruction set computing) processor, which is different from the familiar flavors of Motorola 680x0 chips used in previous models. To take full advantage of the faster machine, programs need to be rewritten especially for the Power Mac.

Just as with everyday applications, the different layers and components of the Mac operating system (it's just another application, after all) were designed to run under the older architecture. All older programs built for the older Macs need an emulator to function on a Power model.

Unfortunately, moving operations in and out of the emulator slows things down, but there is a silver lining. Just as ordinary software gains a pickup from a PowerPC rewrite, so do the pieces of the system. As they are remade native, your Mac will get faster and faster. New models will sport faster processors and more capable bus designs, but a current Power Mac will still gain from future systemware upgrades—contrary to the laws of instant-obsolescence we find in the computing industry. Still, Apple couldn't rework all of the system at once, so it's supplying the parts piecemeal.

The update adds a new Math Functions Library (MathLib) that boosts performance of math operations on Power Macs. The installer seems to think that what's good for the top of the line is good for everybody and sticks a copy of the software in the Extensions folder. If you don't have a Power Macintosh, save some disk space and drag the file to the Trash.

One of the great new features of System 7.5 is Apple Guide, the new intelligent help system. The new v1.2.5 improves performance on all Macs, runs native on Power Macs, and is compatible with At Ease.

- **Storage Stuff.** You may not have noticed that some of the recent low-cost Macs have been filled with an IDE (integrated drive electronics) drive instead of the traditional SCSI fla-

BMUG's Choice for Macintosh Specialty Store Celebrating Our 10th Year

MAC℠

Modern Accessories for Computers
Since 1985

800-BUY-A-MAC Order Line for US & CA (Toll Free!)
(510) 644-0500 General Number / Sales Department
(510) 549-8785 Macintosh Repairs
(510) 644-0584 Order by Fax
2156A University Avenue, Berkeley, CA 94704

Rental, Lease or Purchase of Macintosh

Store Hours
10:00 a.m. -- 6:00 p.m.
MON -- SAT

ATM VISA MasterCard

TOP 10 Store in the Bay Area ... San Francisco Examiner Reader Poll

Modem

Teleport Gold II v.32bis 14,400	**$145**
Teleport Platinum 28,800 FaxModem	**$269**
PowerPort Gold for PowerBook	**$269**
PB DataLink w/ Voice FaxModem	**$199**
US Robotics Mac&Fax 14,400	**$139**
US Robotics Mac&Fax 28,800	**$269**

Printer

Deskwriter 510 w/ Cable	$329
Deskwriter 560 w/ Cable	$529
Apple LaserWriter Select 360	**$1459**
•600dpi, Fast 10 PPM, Post Script Level II Laser	
HP LaserJet 4MV, 11X17 Size	**$2995**
•600 dpi 11x17 A3 Size Laser Printer	
StyleWriter II, w/ Cable	**$299**

Memory Upgrade

256K Level II Cache, PowerMac	$259
1 Meg Simms, 100ns/80ns	$49
2 Meg Simms, 80ns	$99
4 Meg Simms, 80ns	$199
8 Meg Simms, Quadra/PowerMac	$329
16 Meg Simms, Quadra/PowerMac	$595
32 Meg Simms, Quadra/PowerMac	Call
4 to 14 Meg Board, PB Duo	Call
4 to 10 Meg Board, PB 145B/165/180	Call
4 to 10 Meg Board, PB 165c/180c	Call
4 to 16 Meg Board, PB 500 Series	Call

SyQuest Special

Micronet 200MB External, 1Cartridges	$595
Micronet 270 SyQuest, 1Cartridges	$595
SyQuest 44MB / 88MB Cart.	$65/83

Scanner

HP Scanjet IIcx Color Scanner	**$819***
Agfa Studio Scan II Scanner	**$1095**
•24 Bit Photo-Realistic Color / 256 Gray-Scale	
•Sharp 400x800 optical resolution	
Agfa Arcus II1200dpi Scanner	**$2799**
•12 bit per pixel, 36 bit colors	
•Excellent for professional prepress & image editing	*Special*
•Transparency adapter included	
•Photoshop Full Version 3 Included	

PowerBook Rental

Powerbook 145B	$169/Mo.
Powerbook 160/165/170	$199/Mo.
Powerbook 180	$219/Mo.
Powerbook Duo 270c	$179/Mo.

CD ROM's

Apple Multimedia Kit	**$449.00**
MicroNet Multimedia Kit	**$399.00**
Rebel Assault, CD	**$54.95**
Myst, CD	**$54.95**
Sensory Overload, CD	**$49.00**
Wolfenstein	**$49.00**
Harry and the Haunted House	**$39.00**
Arthur's Birthday	**$39.00**
Little Monster at School	**$39.00**

Gift Certificate Available
More popular CD titles in stock

Macintosh Repair

•PowerBook Not Running from Battery? We Can Repair It at 1/4 of Cost of Apple Dealer.
•We Can Repair/Install While-You- Wait.
•On Site Service Available
•Expert Installation Ready by Next Day
•Expert Repair in 1 to 2 Days

PowerMac 8100/100
16MB/1000HD/CD $4249

Quadra 630
4mb/250HD
CPU Only **$995**

PowerBook 150	
4MB/120HD	$1249
PowerBook 540c	
4MB/320HD	$3699
PowerBook 520	
4MB/160HD	$1749
PowerBook 520c	
4MB/160HD	$2195
PowerBook 520c	
12/320/Modem	$3169

Power Mac 6100/66, 8MB/350HD	**1699**
Power Mac 6100/66, 8MB/350/CD	**1899**
Power Mac 6100/66, 16/500/DOS/CD	**2619**
Power Mac 7100/80, 8MB/700/CD	**3069**
Power Mac 7100/80AV, 16MB/700/CD	3599
Power Mac 8100/100, 16/1000/CD	**4249**
Power Mac 8100/100AV, 16/1000/CD	4499
Apple 14" Plus Monitor	$309
Apple 15" MultiScan Monitor	**$499**
Apple Multiple Scan 17 Display	$979
Apple Multiple Scan 20 Display	**$1995**
Apple Laserwriter Select 360	$1499
Laserjet 4MV, 11x17 600dpi Printer	$2995
Sony 15sf Multisync monitor	$499
Sony 17sf Multisync monitor	$895

LaserWriter Repair

•Fast 1-2 Day Repair
•All Apple & HP Laser Printers
•Competitive Rate

Mac Trade-In

•We Buy or Trade Any Macintosh CPU (Mac SE minimum) & Peripherals

Mac Hard Disks

Hard Disk Tool Kit PE Included

†External Unit Add $90 ea.

Quantum LPS 170MB HD	**$199†**	**Seagate 2.4 Gig, Barracuda**	**$1495†**
Quantum LPS 270MB HD	**$249†**	**Quantum 2.5" 170 Go Drive**	**$329†**
Quantum 540MB HD	**$349†**	**Quantum 2.5" 500MB Drive**	**$499†**
Quantum 1080MB HD	**$695†**	**Powerbook Hard Disk Case**	**$79**

Macintosh Rentals

Security Deposit Required

Quadra 650	Mac SE	Mac IIsi	PowerMac 7100
8MB/250HD	2MB/20HD	5MB/80HD	8MB/250HD
Call	**$69**	**$129**	**Call**
	Monthly	Monthly	Monthly

Macintosh Lease To Own

Other Models and Options Available Call for Rates

Power Macintosh 6100/66 8/350/CD	**$69/Mo**
Power Macintosh 7100/80 8/700/CD	**$110/Mo**
Power Macintosh 8100/100 16/1000/CD	**$155/Mo**
Sony 15sf Color Display	**$18/Mo**
Apple Multiple Scan 17 Color Display	**$35/Mo**
Agfa Arcus II Scanner	**$108/Mo**
Radius 20GS Monitor	**$32/Mo**
Apple Laserwriter Select 360	**$53/Mo**
NEC Silentwriter 640, *New Low Rate*	**$30/Mo**
HP Scanjet IIcx, Color Scanner	**$36/Mo**
HP Laserjet 4M Plus	**$72/Mo**

36Mo/$1 Lease, $3000-$10000 category. Business Only, Tax Not Included

Prices Advertised Are for MicroTimes Readers Only. Prices subject to change without notice

This Ad Expires May 29, 95

vor. These drives give comparable performance to internal SCSI drives and are found in almost every PC-clone on the market, so are cheaper for Apple to buy. Since there's no outward difference to users in both hardware and Mac software, most people don't know that they have something new under the hood.

IDE drives can be found currently inside the Performa 630 series, PowerBook 150, Quadra 630, and LC 630; and speedier versions will also be used in Macs that are reportedly going to be introduced this summer.

Recently, power users have reported that the internal hard disk would not show up if the system is booted from an external SCSI drive. The problem occurred when the internal disk was selected as the startup drive and the Command+Shift+Option+Delete keys are held down while booting up. This magical key combination works on most Macs and tells the Mac to start up from the external hard drive instead of the internal drive.

The update fixes the problem and also obviates the need for the MountIDE system extension (it should be removed by the installer, so if you see it afterwards be sure to trash it).

* * * * *

Some users moan and groan at the ever-growing RAM requirements of new systemware, extensions, control panels, printer drivers, and applications. You'd better get used to it.

* * * * *

- **Input.** A new feature implemented in the update is the ability to turn off the Mac with the Power key, which is the oversize key on the top of most keyboards. When you press it now—yes, after the Mac is on, smartypants—a dialog box appears that lets you shut down, restart, or cancel the shutdown. On a Mac that can sleep, the dialog also gives you the snoozing option. On the PowerBook 100 series, which does not have a built-in Power key, the shutdown ability is enabled if you plug in an external keyboard.

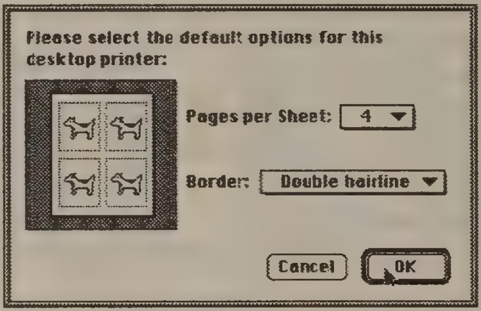
Over-Extended System 7.5

As I mentioned a few months ago, System 7.5 added a bunch of functions to the base Mac system through extensions and little applications. Some of the newcomers are heavy-duty additions and others are graduates from the shareware finishing school.

Here are a few of the changes brought with the System 7.5 Update:

- Stickies is the desktop post-it note application now found under the Apple menu. Unfortunately, Stickies 1.0 has not seen eye-to-eye with another addition to the Mac, WindowShade, which lets users roll up windows into their title-bars. The problem randomly occurred when Stickies 1.0 tried to launch a note that was collapsed either by WindowShade or the Stickies window's odd triangle zoom-box, which collapses a note. The problem caused a nasty Type 1 crash.

The update fixes the difficulty with v1.0.1. Be sure to leave Stickies notes uncollapsed until you install the new software.



Please select the default options for this desktop printer:

Pages per Sheet: 4

Border: Double hairline

- Some people love the Recent Applications, Recent Documents, and Recent Servers additions to the Apple Menu Items control panel; I find them a distraction, but what do I know? The program keeps track of almost everything that is launched, searched, and used and gives you an easy way to get back to where you've once belonged.

But it also tracks all of the files that are opened by an application as part of its launch sequence, such as the plug-in filters used by desktop publishing programs. This can really, really slow down the load times for these applications, which even under the best of circumstances seem to take an unbearably long time. If you seem to be waiting longer for your programs to appear, perhaps think about pulling the plug on the Recent Items trio.

- The System 7.5 Update also comes with QuickDraw GX 1.1, which fixes over four hundred bugs, jacks up performance, and adds a bunch of new features. Although relatively few people are using Apple's GX print architecture, the update addresses many of the concerns surrounding the initial release.

Users found that the first version would lock up the computer when downloading documents with heaps of fonts or styled text, such as bold, italics, etc. When printing with PostScript laser printers, GX seemed to take forever to finish up its business and return control of the desktop. Now it does the downloading quickly in the background and can properly handle the large double-byte character sets found in Japanese and Chinese font sets.

The new GX also comes with Adobe Type Manager 3.8.2, a native version of the PostScript extension for Power Macs.

One of the cool additions with the update is the N-Up Printing extension. It lets you automatically print up to sixteen pages on a single page. It also lets you put a border around each page drawn on a sheet. This not only lets you save paper and toner, but is real handy if you're working on pages to hand out at a presentation. Instead of printing huge pages consisting primarily of only a few lines of text, you can easily consolidate an entire talk onto a few pages. Check out the screen dump of the setup window for the extension.

GX 1.1 also comes with three new paper types to help configure printer paper trays. You can use letterhead, stationery, and three-hole punch varieties, or create your own with the PaperType Editor. Remember that although the new paper types, stored in the extension folder, are placed in the System folder by an Easy Install, the editor is available only through a custom-flavored installation.

Shareware Spotlight

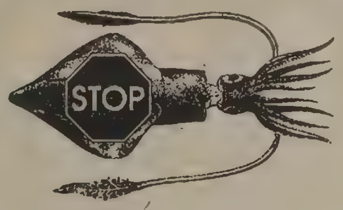
PaperClip, a new freeware utility, was recently uploaded to BMUG's online service, Planet BMUG. Written by Ben Hellstrom, the software replaces the need to occasionally eject a floppy manually with a paper clip.

Sometimes a program or extension conflict will screw up the operation of the floppy driver, or the file manager, and cause it to forget that there's a floppy in the drive. By sticking a paper clip in the little hole next to the drive, you can manually engage the ejection mechanism. But this action can also bring grief to open files on the disk.

PaperClip closes files and unmounts volumes, as well as triggering an ejection, thus avoiding many of the problems associated with employing a physical clip. The program is available on most online services. ■

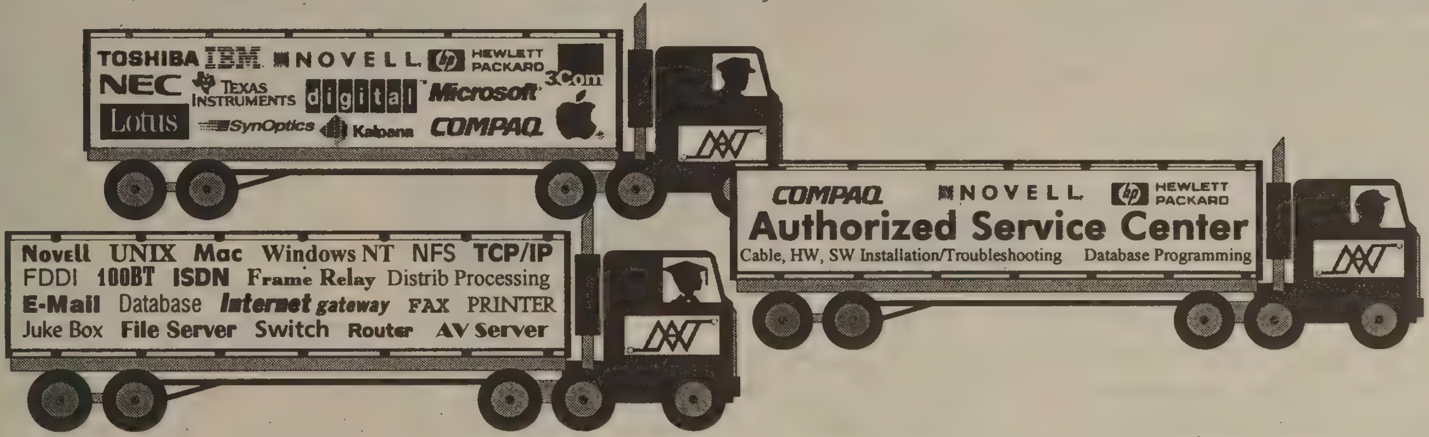
Copyright © 1995 by David Morgenstern. All rights reserved.

When Computer & Network



are the axles for running your business;
and prices are low low everywhere,
vendor service becomes the most crucial thing.

You need strong hands but not finger pointing!


TOSHIBA IBM NOVELL HEWLETT PACKARD
NEC TEXAS INSTRUMENTS digital Microsoft 3Com
Lotus SynOptics Kalpana COMPAQ
COMPAQ NOVELL HEWLETT PACKARD
Authorized Service Center
Cable, HW, SW Installation/Troubleshooting Database Programming
Novell UNIX Mac Windows NT NFS TCP/IP
FDDI 100BT ISDN Frame Relay Distrib Processing
E-Mail Database Internet gateway FAX PRINTER
Juke Box File Server Switch Router AV Server
NAC

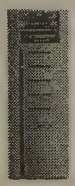
Internet Gateway

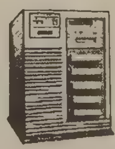
So many alternatives out there
So intricated parameters involved
So easy to mess up
How can you be sure your money and time
is used wisely?

Network Associates Corporation
Is all you need for the answer!

Cream of the Crop: Pentium 90 File Servers!

-- 32M RAM, 32-bit Fast-SCSI2 adapter, 4G HD, SCSI2 CD ROM, 32-bit Ethernet card --





	COMPAQ Prosignia Server	IBM PC Server	digital DECpc XL Server	HEWLETT PACKARD NetServer
Pentium 90	8,582	13,247	7,695	10,528
486/66	3,981	4,362	4,440	4,199

-- 8M RAM, 32-bit Fast-SCSI2 adapter, 1G HD, SCSI2 CD ROM, 32-bit Ethernet card --

Reliable Server? No more for them only. For you too!

Network Associates Corporation

Sunnyvale 408-733-2600 Fremont 510-651-3546 Walnut Creek 510-820-1628
FAX: 408-733-4268 email: sales@nac.com

What Is BMUG?

BMUG is an educational, nonprofit, consumer advocacy group organized to share information and provide critical direction to users and developers in the computer community worldwide. It is an independent advocate, not affiliated with any manufacturer, delivering trustworthy information and useful products.

Like any growing organization, it is many different things to its fifteen thousand international members. BMUG supports many special interest groups (SIGs), 18-line Planet BMUG and 11-line BMUG Boston BBSes, a software library, weekly meetings, publications, and much more. BMUG also puts out a semi-annual 500-page book that we call our "newsletter."

Our motto continues to be: *We're in the business of giving away information.*

Come and join in the dialogue at the BMUG main meeting every Thursday evening, 6:30–9:30 (or whenever we finish), on the UC campus. BMUG West and BMUG South are monthly meetings held in San Francisco and San Jose. Check the Announcement Line at (510)549-2684 ext. 8.

The BMUG Office, 2055 Center Street (a half block from the BART station), is open to the public 8:30 am–4:30 pm. Please come by, say hello, and meet other members.

The BMUG Helpline provides volunteer technical assistance and telephonic hand-holding for our members. If your question can't be answered on the spot, we try to get you in touch with someone who can help. Improve your Macintosh education and help others by becoming a Helpline volunteer!

BMUG has one of the most up-to-date, comprehensive software libraries around with hundreds of disks filled with the latest versions of public domain or shareware programs. BMUG also produces CD-ROM collections, including the digital video *TV-ROM ™Too*, and the *BMUG PD-ROM.*

Planet BMUG and BMUG Boston are graphical user interface FirstClass bulletin board systems, offering the latest in shareware, as well as news, private email, rumors, etc. With our 18-line capability, you can have access to BMUG almost 24 hours a day. It's easy to use, fun, and a great resource.

BMUG can be found on most online services, including e•World. BMUG can also be reached through the Internet network at *UG0001@applelink.apple.com*.

To get some further information about BMUG please write to: BMUG, 1442A Walnut Street, #62, Berkeley, CA 94709. If you prefer to phone our business office, call (510)549-BMUG, or fax (510)849-9026.

Quality, Service, Savings, ALL IN ONE.
"FREE Lifetime Technical Support"
BAYTRON COMPUTERS

PENTIUM 90/66
- PCI/ISA Motherboard SIS
- 256K Cache (Exp. to 1MB)
- 8MB RAM (Exp. to 128MB)
- 1.44MB Floppy Drive
- 540MB IDE Hard Drive
- PCI Video Display 1MB
- 15" SVGA (.28 dpi)
- Microsoft Mouse w/pad
- 101 Enh. Keyboard
- 2S/1P/1G Ports
- DOS 6.22 & Win 3.11..

$1895/1565

486 Basic System

Main Configurations:
Intel 486SX-25 CPU,
200MB HD, 4MB RAM,
1.44MB FD, 14" SVGA,
Mouse w/pad, Keyboard
Dos 6.22 & Win 3.11

"Monthly Special"
$680
Upgrading Available!

"MULTIMEDIA" PACKAGE
Double/Quad
CD-ROM, with
16-bit Stereo
Sound Card,
& Pair of labtec
Amp. Speakers
$195/285

486DX4-100*
$995

*VLB/PCI Motherboard
256K Cache
4MB (exp. to 64)
250MB IDE Hard Drive
1.44MB Floppy Drive
14" SVGA (.28 dpi)
Microsoft Mouse w/pad
101 Enh. Keyboard
Dos 6.22 & Win 3.11..
w/540MB.................+85

486DX2-66*
$890
486DX2-80.........$910

Trackball
Mouse-Quicktrak
$14.00

CPU's
486SX-25/33...........$45/65
486DX2-50/66......115/139
Pentium 66/90.....305/579

250MB Removable IDE Hard Drive
~~$165~~ $125

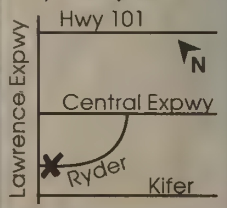
486DX2-50*
$865

486DX-33*
$850

VISA M/C *Prices subject to change without notice..*

Corporate Orders Welcome!
3069 Lawrence Expwy
Santa Clara, CA 95051

(408)733-3338 . FAX:733-3360
OFFICE HOURS: (Monday-Saturday) 10:00 AM-6:00 PM



GOLDEN MICRO COMPUTERS

BEST SERVICE IN TOWN

5 Years Labor Warranty 1 Year Parts Warranty

Extended Warranty Available!

EVERY SYSTEM INCLUDES:

4 MB RAM, 420MB IDE Hard Drive, 14" SVGA Monitor (1024x768, .28dp) & 1MB SVGA Card, 2 Floppy Drives (1.2 & 1.44MB), IDE/IO Card, 2 serial, 1 parallel, and 1 game port, 101 Enhanced Keyboard, Minitower or Desktop Case with Power Supply.

Pentium
100/90/75/60 MHz
Motherboard & CPU w/Fan
$885/755/535/485
LM speed: 577/520/433/340

$20 FOR 540MB HARD DRIVE
$80 FOR 850MB HARD DRIVE

PENTIUM 100/90/75/60

- PCI and ISA
- 256K Cache
- 8MB RAM
- Stealth 64 PCI SVGA Card

Landmark speed: 577/520/433/340

$2050/1950/1730/1680

MULTIMEDIA 486DX DX2-66/DX-33 Complete Systems

Same specifications as the system to the right plus:

- 2X Speed CD-ROM Drive
- 16 Bit Sound Card
- 40 Watt Speakers

$1229/1169

VESA LOCAL BUS 486DX DX2-66/DX-33 Complete Systems

- Pentium Ready
- 256K Cache
- 4MB RAM exp to 32MB
- 8K Internal Cache
- Shadow RAM

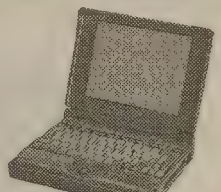
Landmark speed: 220/111

$999/939

486DX2-50 Notebook

- Dual Scan Display
- 4MB RAM
- 350MB Hard Drive
- 1.44 Floppy Drive
- Trackball
- PCMCIA Interface
- Easy to upgrade CPU & RAM

$1750



CASE & POWER SUPPLY

Minitower w/230 Watt	$35
Desktop w/200 Watt	40
Mid Tower w/230 Watt	60
Full Tower w/250 Watt	75
200/230 Watt power supply	20/25
200 Watt Green PC Power Supply	48
300 Watt (UL) Power Supply	55
Wild Power Cord	2

VGA CARDS

MGP	$14
VGA 800x600, 256K	24
VGA 1024x768, 512K	35
VGA 1024x768, 1MB	55
VGA 1024x768, 1MB w/Windows Accelerator	59
Kelvin VLB VGA 1280x1024, 1MB	125
Diamond Stealth 64 PCI/VLB	125
ATI PCI VLB w/Local Bus	115
Upgrade to 2MB	59

ADD ON CARDS

IDE (ISA)	$10
I/O	10
IDE/IO	13
IDE/IO (VLB)	18
w/16550	38
MFM Controller	25
Adaptec 1522/1542	85/175
Ethernet 16 Bit Coax Jumperless	35
Ethernet 16 Bit Combo (Coax & 10 Base T) Jumperless	39

FLOPPY DRIVES

Teac 1.2MB 5.25"	$42
Teac 1.44MB 3.5"	35
1.44 Floppy Diskette	30¢

MISCELLANEOUS

387SX33/25 Math Co	$20
387DX-40/33 Math Co	20
Logitech Mouseman (OEM)	35
3-Button Mouse	6
9 Pin Printer Alton AP 2000	99
HP 540	290
HP 560C	485

CD ROM & SOUND CARD

2X CD-ROM	
Sony/Mitsumi/Panasonic	$120
4X CD-ROM	
Mitsumi	195
Teac 55A	195
Toshiba	195
2X CD-ROM (SCSI)	
Chinon CDS 535	225
Sound Blaster 16	80
Sound Blaster 16 MCD	90
Sound Blaster 16 MCD Compatible	60
Speakers	
4W/40W/80W/120W	$10/30/50/60
CD Games	4.99

KEYBOARDS

101 Enhanced	$15
Maxiswitch/Keytronic	25

MODEMS

960/2400 Fax/Modem	$35
14.4 Fax/Modem	60
14.4 Fax/Modem w/Voice	80
14.4 Fax/Modem (ext)	70
28.8K Fax/Modem	149

MOTHERBOARDS & CPU

386SX40	$55
386DX40/128K	85
386DX33/128K No/CPU	50
486SX40 (UMC)	108
486SX25/33 (Intel) 256K	135/155
486DX2-66 (AMD)	225
486DX2-80 (AMD)	265
486DX4-100 (AMD)	315
486DX2-66 (Intel)	275
486DX4-100 (Intel)	385
Pentium 60/75	485/5535
Pentium 100/90 (Sis/Opti)	885/775
Pentium 90 (Intel/Micronics)	890/950

TAPE DRIVES

250 MB Colorado	$155
120 MB/250 MB Tape	15

MONITORS

14" Mono (refurbished)	$40
14" Mono VGA	85
14" SVGA (.39)	175
14" Non-Int SVGA (SOCOS)	205
15" ExView 1180x1024 Digital	295
17" ExView 1024x768 .28	555
17" ExView 1600x1280 Digital .26	655
21" ExView 1600x1280 Digital .26	1650

HARD DRIVES

IDE DRIVES

210MB	$145
245MB	150
270MB	155
340MB	170
420MB	175
540MB	185
850MB	260
1GB	369
1.2GB	395

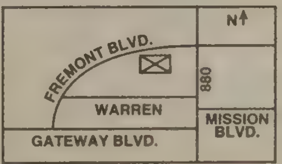
SCSI DRIVES

340MB	$190
540MB	245
1GB	475

PC Repairs & Upgrades Welcome

46560 Fremont Blvd, Suite 408 • Fremont, CA 94538
(510) 623-0866 (800) 588-0866
FAX (510) 623-0321
Hours M-F 9-5:30 Sat 10-3

Ad reflects cash discount. • Prices subject to change without notice. • Not responsible for typographical errors.



GOLDEN MICRO COMPUTERS

HAVING TROUBLE GETTING ALL THE FACTS

WT ShowBIZ 486 Multimedia Presentation Notebook - Combines Portability and unique **Over-head Projection capability**

WT Local Bus 486 ShowBOOK 4E - Performance & Upgradability via a Fully Modular Design

WT PCI Pentium ShowBOOK P5 - Blazing Speed and Lasting Value

Before you purchase a notebook, call us. We will provide a **written competitive analysis between our notebooks and up to three other notebooks you may be considering.**

The cost of owning a computer has as much to do with quality control, timely service and pre-sales consulting as it does with the up front price of a computer. At Wedge Technology, we are not the cheapest, but by the time you have used your computer and relied on Wedge for support and service, you will find that the value you receive far outweighs the small amount you may be thinking you might save by purchasing the cheapest product. **After 14 years in the PC wars,** Wedge is very familiar with the suffering that users often face as a result of considering only the up front cost of a machine. Companies selling at a few percent above their cost are often on their way out or don't have a budget to provide even reasonalble support. Wedge will provide you with references and demonstrate its commitment to value. **Your investment in Wedge Technology is secure.**

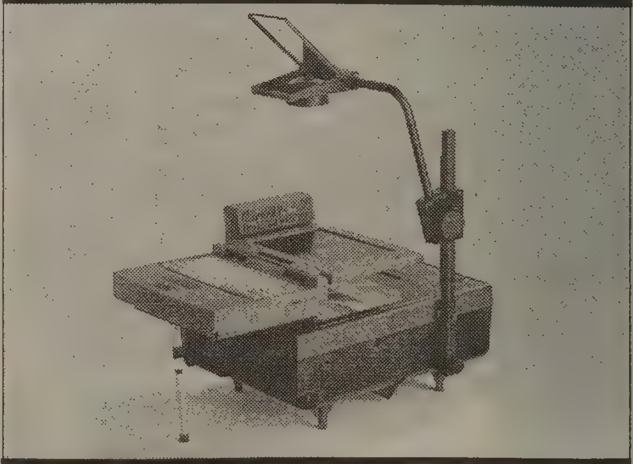
The ShowBOOK product line gives you performance and upgradability via a totally modular notebook design. With plug and go portable hard drive, user upgradable microprocessor and memory, upgrading your system is easy. All the ShowBOOK products provide support for PCMCIA Type II and Type III. The ShowBOOK 4E supports PCMCIA type IV as well.

The **ShowBIZ** gives you the best of two Technologies in one design. **Combining all the advantages of a high performance notebook and the advanced capabilities of a high powered projection panel**, you can now setup an over-head projection presentation without the need of additional peripherals in a matter of seconds. By providing a back side removable cover on the display screen, users can easily and quickly make high powered presentations and demonstrations without hassling with costly external display connectors and projection interfaces. Not only is the system superior in performance and ease of operation, but cost thousands less than buying the combination of a notebook and a separate projection interface panel.

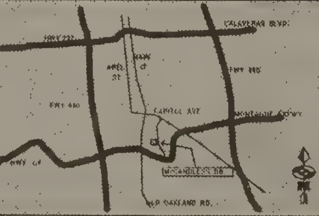
Manufacturer Model	WEDGE ShowBOOK4E DX2-50	Gateway Colorbook2 DX2-50	Dell Latitude XP 450C	Compaq LTE Elite 486DX2/50
Multimedia	YES	YES	NO	NO
Processor Upgradable	YES	NO	NO	NO
Up to 36MB RAM	YES	NO	YES	NO
External Cache	YES	NO	NO	NO
PCMCIA Type IV	YES	NO	NO	NO

All information in the competitive chart is current as of 3/3/95
All brands & products are trademarks of their respective companies

ShowBIZ in Action!



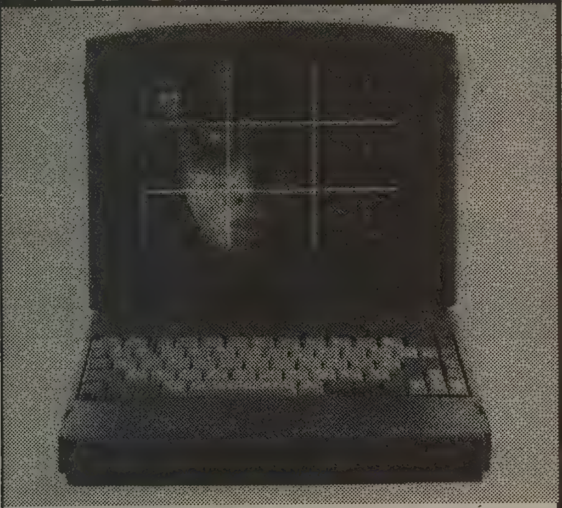
WEDGE SINCE 1981
TECHNOLOGY, INC.
Your Partner for Success
1657 McCandless Drive, Milpitas, CA 95035



Sales: 408-263-9888
Fax: 408-263-9886
Email: Wedge1981@aol.com

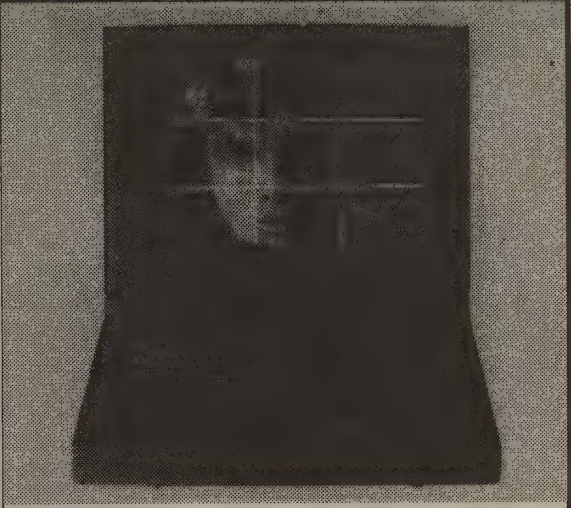
ON WHICH NOTEBOOK IS BEST FOR YOU ?

WEDGE ShowBOOK 4E



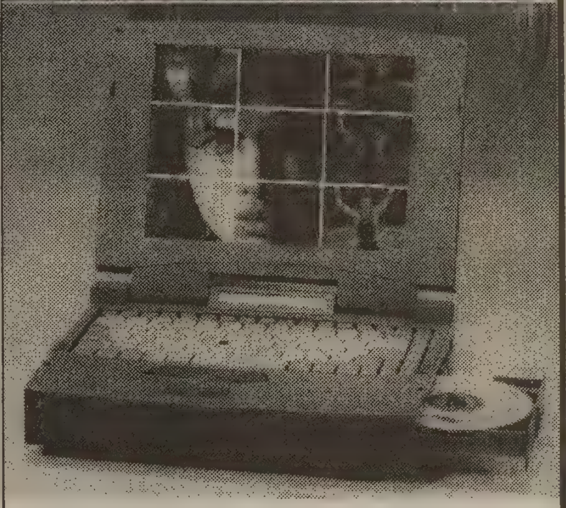
- Multimedia 486 Notebook **(Mono/DS/AC)**
- Upgradable CPU (SX/DX/DX2/100**DX4**)
- **128Kb Cache and up to 36MB RAM**
- True 32-bit VESA Local Bus
- PCMCIA Type IV slot
- **Built-in Audio chip,** Microphone & Speaker
- **Removable HDD** (260,340,450,&540MB)
- **Two Hot Swap NiMH Batteries**
- Built-in 25mm Trackball w/ Palm Rest
- 128Kb Flash ROM w/ APM
- **1Mb V RAM** provides 1024x768 w/ 256 Colors
- 3.5" 1.44MB Floppy Drive
- Luxury Carrying Case
- Optional Easy Docking Station
- Optional VESA Local Bus Multimedia Docking Station w/ Built-in Stereo Speakers and VESA Local Bus Slots.

WEDGE ShowBOOK P5



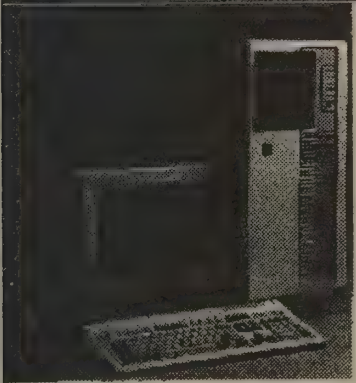
- Multimedia 586 Notebook **(DS/AC)**
- **Pentium 586-90MHz** Processor
- **256Kb Cache and up to 40MB RAM**
- **PCI Local Bus Video and IDE Controller**
- PCMCIA Type III or Two Type II slots
- Built-in Audio, Microphone & Stereo Speakers
- HDD options of 260, 340, 450, 540, and 720MB
- Built-in Trackball w/ Palm Rest
- 128Kb Flash ROM w/ APM
- 1MB VRAM provides 1024x768 w/ 256 Colors
- 3.5" 1.44MB Floppy Drive
- **Bi-direction EPP/ECP parallel port**
- High Speed **16550 UART Serial port**
- **Infra Red Wireless Interface**
- NiMH Battery and Carrying Case
- Optional Multimedia Docking Station w/ Built-in Stereo Speakers and Expansion Slots.

WEDGE ShowBIZ PC



- **Multimedia PRESENTATION Notebook w/ removable backlit panel for use with Overhead Projection (Active Color)**
- Upgradable CPU (SX/DX/DX2/DX4-100MHz)
- **128Kb Cache Exp. to 1Mb, Max 32MB RAM**
- True 32-bit VESA Local Bus
- 1 Type III or 2 Type II Slots
- Built-in Sound Chip Microphone & Speaker
- Removable HDD (260, 340, 450, and 540MB)
- **Built-in MousePOINT w/ Palm Rest**
- 128Kb Flash ROM w/ APM
- 1MB VRAM provides 1024x768 w/ 256 Colors
- 3.5" FDD **(Can replace w/ 2nd battery)**
- NiMH Battery and Luxury Carrying Case
- **Optional CD-ROM Module w/ MPEG card**
- **Optional PC-Video Capture Module**
- **Optional Type III PCMCIA Module**

PENTIUM SUPER SERVER

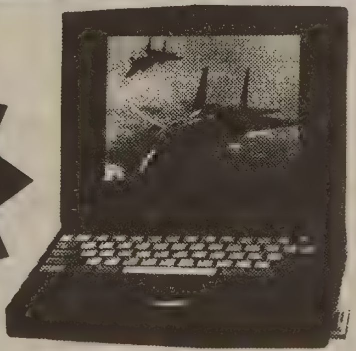


With Server Integrated Parallel Ethernet Switching, You can Dramatically Increase Bandwidth and Reduce Latency.

100MHz Pentium Processor	→ Fast and Compatible
Four 64-bit PCI Bus Slots	→ Faster Peripheral Performance
Four 32 EISA Bus Slots	→ Bus Mastering Network Components
Server Integrated Parallel Ethernet Switch	→ Increase Bandwith w/ existing NIC
SwitchCON Software included	→ Configuration and Traffic Monitoring
Optional SNMP Agent	→ SNMP managers can manage the switch
512K Write Back Cache	→ Exceptional Memory Performance
Supports up to 512MB RAM	→ High Growth Potential
Store and Forward Switching Engine	→ Eliminates Bottlenecks of external switch

ShowBOOK EL - $PECIAL!!!

486DX2-66,
240MB HDD,
Mono, 4MB RAM
Only
$1,289



- Supports all Intel, AMD and Cyrix 486 Compatible CPU's
- Up to DX4-100MHz
- 4MB Standard upgradable to 32MB using Standard 72-pin SIMM modules
- User Upgradable Hard Disk Drive (260, 340, 420, 520, 720, and 820)
- Built-in PCMCIA Slot
- Built-in Trackball with Palm Rest
- Built-in 1.44MB 3.5" Floppy Drive
- Monochrome and Dual Scan Color available
- External Simultaneous VGA display, Serial, Parallel, Keyboard ports

Here are some quotes from PC Magazine with regard to the ShowBOOK IV:

PC MAGAZINE

"The ShowBOOK's standard local-bus video came through to secure the top Graphics WinMark score...", "...overall performance on our test was very good.", "The ShowBOOK ranked in the top five in all test categories..."

VISA

MasterCard

Optional Leasing Available, call for a monthly lease quotation.

Optional 3 Year extended on-site warranty available, call for details.

Call: 408-263-9888

C&J COMPUTERS...

Great Prices & LIFETIME Labor Warranty On All Our Systems!!

MICROPOLIS
9.0 GB, SCSI-2
MC1991
3.5" x 1"
10ms, 5400 RPM
5 Year Warranty
$2665

MICROPOLIS
4.0 GB, SCSI-2
3.5 x 1"
8.5ms, 5400 RPM
5 Year Warranty
$1495

QUANTUM
540 MB IDE
3.5" x 1"
12ms
$170

QUANTUM
1 GB SCSI-2
3" x 1"
11ms
$549

CONNER
420 MB IDE
3.5" x 1"
14ms
$158

CONNER
850 MB IDE
3.5" x 1"
12ms
$230

CONNER
1.2 GB IDE
3.5" x 1"
12ms
$330

CONNER
540 MB IDE
3.5" x 1"
12ms
$170

WESTERN DIGITAL
850 MB IDE
3.5" x 1", 10ms
2 Year Warranty
$240

WESTERN DIGITAL
1.2 GB IDE
3.5" x 1", 10ms
2 Year Warranty
$335

EPSON
FX-870
PRINTER
380CPS, 9 Pin,
FAST
$269

MICRONICS
486 VLB
256K CACHE
IDE/2S/1P
Built-In
$99

PCI
PENTIUM/486
Complete System

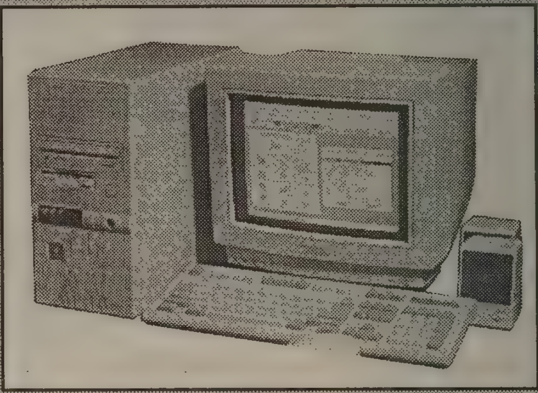
PENTIUM 100 MHz	$1789
PENTIUM 90 MHz	$1639
PENTIUM 75 MHz	$1409
486DX4-100 MHz	$1189
486DX2-80 MHz	$1139
486DX2-66 MHz	$1119

- Green PC Technology
- CPU WITH Motherboard, Cooling Fan
- Math Co-Processor, 256K External Cache
- 8 MB MEMORY (70ns, 72 Pins)
- 540 MB IDE HARD DRIVE
- 1.44 MB 3.5" Floppy Drive
- 32 Bit PCI Cirrus Logic 5434 SVGA w/1 MB (Orchid Kelvin 64 Equivalent)
- 32 Bit PCI 2FD/4HD Controller w/2 Serial/1 Parallel Ports
- CTX 14" Non-Interlaced Full Screen Monitor (1024x768, .28dp, 2 Year Warranty)
- BTC 101 Keyboard
- Med Tower w/230W Power Supply
- Microsoft Compatible Serial Mouse w/Pad
- FCC Class B Approved

VESA
486 LOCAL BUS
Complete System

486DX4-100 (AMD) 256K Cache	$979
486DX2-80 (AMD) 256K Cache	$889
486SLC2-66 (IBM) 64K Cache	$849

- Green PC Technology
- CPU WITH Motherboard
- AMI BIOS/CLOCK/CALENDAR
- 3 VESA Local Bus Slots
- 4 MB (72 Pin SIMM) Memory
- 1.44 MB 3 1/2" Floppy Drive
- 540 MB IDE Hard Drive
- VLB 32-Bit IDE 2FD/2HD Controller w/2S/1P/1G Ports
- VLB 32-Bit SVGA Card w/1 MB DRAM, Windows Accelerator
- 14" Non-Interlaced SVGA Monitor (1024x768, .28dp)
- BTC 101 Keyboard
- Mini Tower w/230W Power Supply
- Microsoft Compatible Serial Mouse w/Pad



PCI
Multimedia Pentium/486
Complete System

PENTIUM 100 MHz	$2199
PENTIUM 75 MHz	$1849
486DX4-100 MHz	$1639
486DX2-80 MHz	$1569

- Green PC Technology
- CPU With Motherboard, Cooling Fan
- Math Co-Processor, 256K External Cache
- 8 MB Memory (70ns, 72 Pins)
- 1.44 MB 3 1/2" Floppy Drive
- 540 MB (12ms) IDE Hard Drive
- 32 Bit PCI 2FD/4HD Controller w/2 Serial Ports, 1 Parallel Port
- PCI Diamond Stealth 64 w/1 MB DRAM
- CTX 14" Non-Interlaced Full Screen Monitor (1024x768, .28 dot pitch, 2 Years Warranty)
- Keytronics 101 Keyboard w/Keyboard pad
- Super Mini Tower w/230W Power Supply
- Logitech First Mouse (400dpi) w/Pad
- 14.4 Int Fax Modem w/Winfax
- 4 Speed Int CD-ROM (600KB/S, 190ms)
- Sound Blaster 16 Sound Card
- Amplified Stereo Speakers
- CD SOFTWARE
  - *-WORDPERFECT 6.1 FOR WINDOWS*
  - *-QUATTRO PRO 6.0 FOR WINDOWS*
  - *-ENVOY 1.0 FOR WINDOWS*
  - *-PRESENTATIONS 3.0 FOR WINDOWS*
  - *-WORDPERFECT INFOCENTRAL 1.1 FOR WINDOWS*
  - *-COMPTON'S INTERACTIVE ENCYCLOPEDIA 95*
  - *-FCC CLASS B APPROVED*

Look Through The Systems On This Page. If You Don't Find The Perfect One For You, We're Happy To Help You Get Just What You Need! So You Can Upgrade, Change, Or Configure From Scratch To Meet Your Specific Needs.

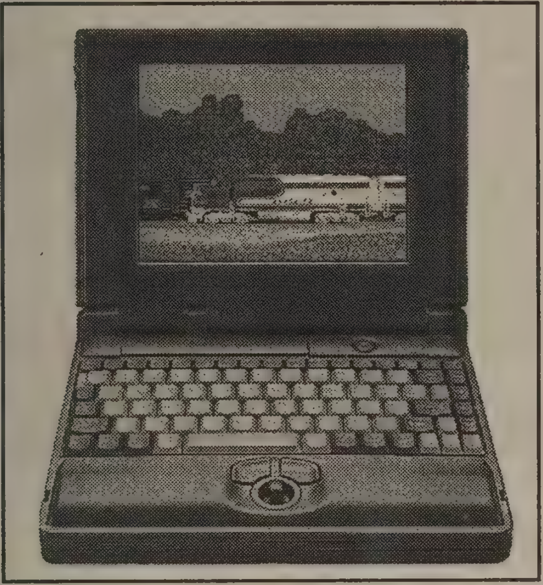
CALL C&J COMPUTERS (408) 727-0788 TODAY TO SOLVE YOUR COMPUTING NEEDS!

C&J COMPUTERS...

Solving Your Computing Needs Since 1989

INTRODUCING

THE MULTIMEDIA NOTEBOOK FOR THE FUTURE... DUAL SCAN COLOR WITH BUILT-IN SOUND & MICROPHONE



486DX4-100 .... $2045

486DX2-66 .... $1975

Includes:

- 8 MB MEMORY (Upgradable)
- LCD DUAL SCAN COLOR STN 256 Colors
- 32 Bit VL Bus Windows Accelerator w/1 MB Video Memory
- Built-In 1.44 MB Floppy Drive
- One Type II & One Type III PCMCIA Slots
- Built-In Trackball
- 340 MB Hard Drive
- 86 Key Ergonomical Keyboard
- Built-In Sound Card, Speakers, Microphone
- Rechargeable NiCAD Battery w/AC Adapter
- Docking Station Interface
- Carrying Bag
- Upgrades Also Available
- ACTIVE COLOR SCREEN..............................CALL
- PENTIUM 90 MHz.............CALL

MULTIMEDIA PACKAGES/CD-ROMS

1) 2X SPEED CD-ROM, Sound Blaster 16, Stereo Speakers and Compton's Interactive Ency. 95 (win)	$199
2) 4X SPEED CD-ROM, Sound Blaster 16 80W, Stereo Speakers and Compton's Interactive Ency. 95	$299
3) 4X SPEED CD-ROM, Sound Blaster 16, SCSI II, Stereo Speakers and Compton's Interactive Ency. 95	$419
Toshiba SCSI 3501B Internal 4 Speed	278
Panasonic Bus Double Speed	109
Sony Bus Double Speed IDE (250ms)	109
Sound Blaster 16 Basic	68
Sound Blaster 16 MCD	74
Sound Blaster 16 SCSI II	103
Labtec CS-150 Stereo Speakers	18
80 Watt Speakers	49

MOTHERBOARDS

Tiger V Pentium 100/90/75, PCI/VLB 256K Cache, Opti Chipset, No CPU	$190
BioTec Pentium 100/90/75, PCI IDE, High Speed IO Built-In UMC Chipset, No CPU	170
INTEL Pentium 100/90/75 PCI IDE, High Speed I/O Built-In Neptune Chipset, no CPU	345
ASUS 486, 256K VLB 3 Volt	115
BIO TEC 486, PCI IDE, High Speed I/O, 256K 486 DX4-100/DX2-80/66	310/265/240
486DX4-100, VLB AMD CPU 256K	269
486DX2-80, VLB AMD CPU 256K	219
486DX2-66, VLB AMD CPU 256K	199
486SX-33, VLB INTEL CPU 256K	169
486SX-25, VLB INTEL CPU NC	129
486SLC-66, VLB IBM CPU Math 128K	150

MOUSE

3 Button Microsoft Compatible	$6
Logitech First Mouse Serial	25
First Mouse Bus	35
Mouseman Bus	62
Microsoft Mouse Serial/Bus (w/System)	25/54

FLOPPY DRIVES

Chinon 1.2 MB	$40
Chinon 1.44 MB	30
Teac 1.2 MB	40
Teac 1.44 MB	30

CONTROLLERS

IDE w/I/O for VLB 2FD/4HD	$17
AT/IO (2 FIFO 16552 UART CHIP 1 FIFO PARALLEL)	34
K-Well AT/IO (2S/2P)	19
K-Well VLB IDE w/2 16550 UART/1P/1G	39
ADAPTEC	
2842 VLB SCSI w/kit	208
2940W (Wide SCSI) w/cable	240
2940 PCI w/cable	189
UltraStor SCSI VLB	159
Qlogic ISA/FL, 7 SCSI	122
Qlogic VESA/FL, 7 SCSI	211
Qlogic PCI/FL, 7 SCSI	120

KEYBOARDS

BTC 101 Keyboard	$16
Keytronics 101 Keyboard	22
Monterey K104 Keyboard	30
Focus FK8000 w/calculator	33
Focus FK9000 Programmable	45

MODEMS & FAXES

9600 Fax/2400 Modem	$32
14,400 Fax/14,400 Modem Int	48
14,400 Fax/14,400 Modem Ext	65
US ROBOTICS	
Sportster 14400 Fax Modem Int	95
Sportster 14400 Fax Modem Ext	110
Sportster 28800 v.34 Fax Modem Int	210
Sportster 28800 v.34 Fax Modem Ext	228

MONITORS

14" Mono	$68
14" VGA Mono	84
14" SVGA 1024x768 NI	200
CTX	
14" SVGA 1024x768 .28	215
CMS1561LR 15" 1024x768 .28	300
CPS17655GM 17" 1280x1024 MPRII	595
NANAO	
F5501W 17" 1280x1024 .28	864
T5601W 17" 1280x1024 .25	1372
F560IW 17" 1280x1024 .31	1146
F760IW 21" 1280x1024 .31	1788
NOKIA	
449E 15" FST 1280x1024 .28 dp	439
447L 17" FST 1280x1024 .28 dp	749
447X 17" FST 1280x1024 .26 dp	989
445X 21" FST 1600x1280 .26 dp	2389
VIEWSONIC	
6E 14" 1024x768 .28 NI	275
15 15" Flat 1280x1024 .28 NI	429
15ES 15" 1024x768 .28 NI Mac II	345
17 17" 1600x1280 .27 NI, Mac II	849
17G 17" 1280x1024 .28 NI	749
20 20" 1600x1280 .28 NI, Mac II	1449
21PS 21" 1600x1280 .26 NI, Mac II	1668

VIDEO CARDS

Cirrus Logic 5422 ISA w/1 MB	$59
Cirrus Logic 5428 VLB w/1 MB	69
Cirrus Logic 5434 PCI w/1/2 MB	90/135
Trident 9440 Agi VLB w/1/2 MB	69/114
ATI	
WinTurbo 64 2MB VRAM PCI	250
WinTurbo 64 2MB VRAM VLB	250
DIAMOND	
Stealth 64 PCI w/1/2 MB DRAM	115/155
Stealth 64 VLB w/1/2 MB DRAM	119/159
Stealth 64 Video PCI/VLB w/2 MB VRAM	260
Viper 2MB VRAM VLB	244
Viper 2MB VRAM PCI	244
ORCHID	
Kelvin 64 VLB 1/2MB	119/168
Kelvin 64 PCI 1/2MB	119/168

NETWORKING

Intel 16 Bit Ethernet Card 10BaseT	$85
3COM	
3C509 ELINK III Coax/5 Pack	95/449
C509 ELINK III TP/5 Pack	85/405
C509 ELINK III Combo/5 Pack	120/498
ETHERNET 10BASET HUB	
3-Com Link Builder 12 Ports TP	349
BOCA 8 Ports TP Only	145
NOVELL NETWARE (OEM)	
V3.12-5/10/25/50 Users	538/1158/1688/2228
V4.01-5/10/25/50 Users	768/1458/2058/2678

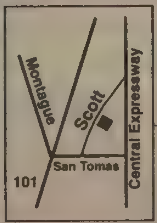
TAPE BACK-UP

Colorado	
DJ-35 350 MB (OEM/ORIG)	$144/148
JT-20 Tracker 250 MB Ext	275
PT-10 Power Tape 1 GB Int	644
PT-25 Power Tape 2.4 GB Int	924
PT-50 Power Tape 4 GB Int	1128

CASE/POWER SUPPLY

Mini Tower w/230w PS	$35
Med Tower w/230W PS	55
Full Tower w/250W PS	75
Baby AT w/250W PS	46

LIFETIME LABOR WARRANTY ON SYSTEMS & 1 YEAR PARTS WARRANTY



C&J
COMPUTERS, INC.
3036 SCOTT BLVD.,
SANTA CLARA, CA 95054
FAX (408) 727-1209
Mon-Fri: 9:30-6 Sat: 11-5

C&J COMPUTERS, INC.
"Quality Systems Since 1989"

(408) 727-0788

EMAIL: chauwei@aol.com

Terms & Conditions

- One year Parts
- Prices and availability subject to change without notice
- Shipping, COD, & insurance are extra and not refundable
- Prices reflect cash discount
- All returns must have prior authorization
- All returns must be in original packaging complete with manual, software, etc...
- 15% restocking charge
- Not responsible for typos on this ad

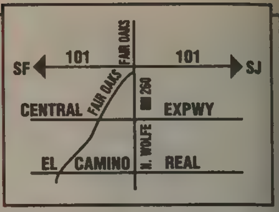
SCHWAB SYSTEMS
SINCE 1987

SCHWAB COMPUTER

260 N. WOLFE RD. • SUNNYVALE, CA 94086 • HOURS: M-F 9-6 SAT 11-4

WE ARE GREAT AT BUILDING SYSTEMS

TEL:(408)245-6666 • FAX:(408)245-3103
EMail: schwabcomp@aol.com



MasterCard VISA AMERICAN EXPRESS

PENTIUM POWER SYSTEM INTEL PCI-90 MHZ

- -INTEL P-5 90 MHz PCI Motherboard (Neptune)
- -256K Cache
- -16 MB RAM
- -Teac 505 Dual Floppy Drive
- -1.05 GB IDE Hard Drive
- -PCI IDE Controller w/Fast I/O
- -ATI Graphics Expression PCI w/2MB
- -ViewSonic 17G SVGA 1280 NI .26mm
- -Keytronic Keyboard & Microsoft Mouse
- -Mid-Tower Case w/230W PS

$2998

SC PENTIUM VESA/PCI VALUE SYSTEM

- -INTEL P-5 66 MHz CPU
- -256K Cache VESA/PCI PC Board
- -8 MB RAM
- -1.2 or 1.44 MB Floppy Drive
- -540 MB IDE Hard Disk
- -VESA/PCI SVGA Accelerator w/1 MB
- -14" SVGA Monitor NI 0.28mm
- -Mouse, Keyboard, I/O, Mini-Tower Case

$1498

SC 486DX4-100 VESA/PCI WINSTATION

- -256K VESA/PCI System Board
- -8 MB RAM
- -1.2 or 1.44 MB Floppy Drive
- -540 MB IDE Hard Disk
- -15" SVGA Full Screen Monitor
- -Mouse, Keyboard, I/O, Tower Case
- -VLB/PCI Windows Accelerator Card w/1 MB

$1398

SC 486DX-33/40 MHZ STARTER/WORKSTATION

- -256K Cache VESA System Board
- -4 MB RAM
- -1.2 MB or 1.44 MB Floppy Drive
- -270 MB IDE Hard Drive
- -SVGA Adapter w/512K
- -14" SVGA Monitor 1024 0.28mm
- -Mouse, Keyboard, Tower Case & I/O

$888

SC 486DX4-100 VESA CAD STATION

- -256K Cache VESA PC Board
- -16 MB RAM
- -1.2 or 1.44 MB Floppy Drive
- -540 MB IDE Hard Disk
- -Orchid Kelvin 64 VESA SVGA Card w/1 MB
- -17" SVGA Monitor 1280 NI 0.28mm
- -Mouse, Keyboard, I/O, Tower Case

$1998

SC 486DX2-66/80 MULTIMEDIA

- -256K VESA System Board
- -8 MB RAM
- -1.2 MB or 1.44 MB Floppy Drive
- -540 MB Hard Disk
- -VESA SVGA Accelerator w/1 MB
- -14" SVGA Monitor 1024 NI 0.28mm
- -Mitsumi Double Speed Internal CD-ROM
- -16-Bit Stereo Sound Card w/MIDI & Voice Synt.
- -Mouse, Keyboard, Tower Case, I/O, Speakers
- -14 CD Titles Including Groliers Encyclopedia

$1468

SC 386DX-40 VALUE PAK

- -128K Cache ISA System Board
- -2 MB RAM
- -1.44 MB Floppy
- -270 MB Hard Disk
- -SVGA Monitor and Card
- -Mouse, Tower Case, I/O & Keyboard

$698

PATRIOT 4000 MULTIMEDIA NOTEBOOK

- Intel SL Enhanced Processor
- 4MB RAM Expandable to 32MB
- 1MB Flash ROM Programmable BIOS
- Detachable 3.5" 1.44MB Floppy Drive
- 340 MB IDE Hard Drive (540/710/810 Available)
- 32 Bit VLB SVGA 1024x768 w/1MB RAM
- 9.5" Viewable Screen Size (10.3" Available)
- Mono, Dual Scan or Active Matrix
- 86 Keys w/Inverted T Cursor
- Extra Large 25mm Built-In Trackball
- PCMCIA 2X Type II, 1 Type III Slots
- 1 Serial, 1 Parallel, 1 Ext SVGA, Docking Station Ports
- Built-In Sound Card (Sound Blaster Comp) w/1 Line In, 1 Line Out, 1 Mic
- Rechargeable NiMH Battery
- Black Carrying Case
- Auto Switching AC/DC Adapter
- Mono 11.4"x8.7"x1.77", 5.5LBS
- Dual Scan 11.4"x8.7"x1.88", 5.9LBS
- Active Matrix 11.4"x8.7x2", 5.9LBS

	MONO	DUAL SCAN	ACTIVE MATRIX
486DX2-50	$1390	$1740	$2740
486DX2-66	$1470	$1810	$2810
486DX4-100	$1560	$1880	$2880

WE WILL NOT BE UNDERSOLD! CALL FOR EVERYTHING YOU NEED.

NETWORKING SALES & SERVICE

3Com
Novell Authorized Service Center
Novell Authorized Reseller
ARTISOFT INC.

MULTIMEDIA UPGRADE KIT

Panasonic Double Speed CD-ROM
- 16 Bit Stereo Sound Card
- Stereo Speakers
- 10 CD Tilter..............**$219**

CLEARANCE SALE

Item	Price
Symantec Q&A 4.0	$128
MS Visual Basic Pro	$199
Borland Paradox	$99
Microsoft Publisher	$69
MS Excell 5.0	$69
DBase IV	$249
Winfax Pro & Wincom	$79

•WE OFFER LIFETIME FREE TECHNICAL SUPPORT WITH EVERY SCHWAB SYSTEM SOLD PLUS ONE YEAR PARTS AND LABOR WARRANTY.
•PRICES AND AVAILABILITY AND SPECIFICATIONS ARE SUBJECT TO CHANGE W/O NOTICE •NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS •GOVERNMENT, UNIVERSITY AND QUALIFIED FIRMS PO ACCEPTED

"How Fast Is Fast?"

TARANTULA 64

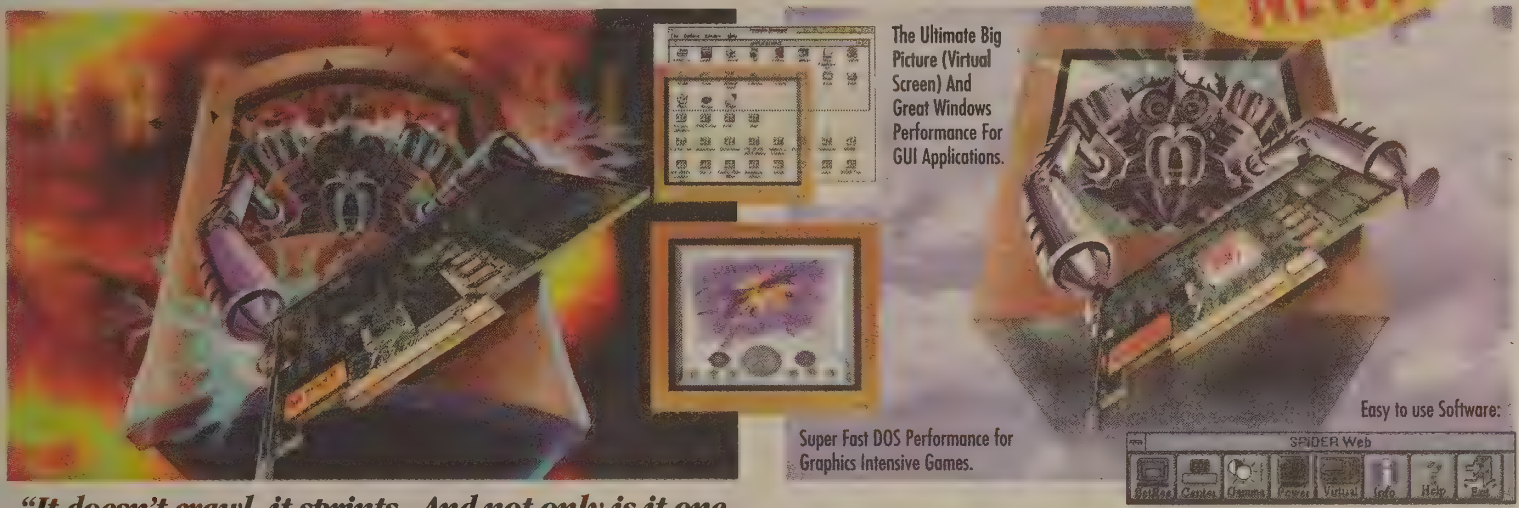
*Faster than ATI Win Turbo™, Matrox MGA Impression Plus™, and Genoa Phantom 64™...**

Introducing: The Affordable

TARANTULA *LITE*

GRAPHICS ACCELERATOR

NEW!



The Ultimate Big Picture (Virtual Screen) And Great Windows Performance For GUI Applications.

Super Fast DOS Performance for Graphics Intensive Games.

Easy to use Software:

"It doesn't crawl, it sprints. And not only is it one of the fastest 64-bit cards you can get, it's also competitively priced."

CMP Windows Magazine Dec. 1994

Tarantula power at an affordable price.

The Tarantula 64 "is fast and dependable."

OS/2 Magazine, April 1995

RESOLUTION	COLORS	MINIMUM MEMORY REQUIRED	SELECTABLE REFRESH RATES
640 x 480	16 to 16M	2MB	60, 72, 75, 90
800 x 600	16 to 16M	2MB	60, 72, 75, 90, 87i
1024 x 768	16 to 64K	2MB	60, 70, 75, 87i
1024 x 768	16M	4MB	60, 70, 75, 87i
1280 x 1024	16	2MB	90i
1280 x 1024	256	2MB	60, 72, 75, 90i
1280 x 1024	64K	4MB	60, 72, 75, 90i
1600 x 1200	256	2MB	60
1600 x 1200	64K	4MB	60

Available colors: 16, 256, 32K, 64K, 16M, i=Interlaced
(Graphics modes support varies between applications.)

In Brief: "This upgradable card has a speedy accelerator that generates processing firepower, while the Bird's Eye software lets you pan and zoom with ease."

CMP Windows Magazine Dec. 1994

ARCHITECTURE:

Accelerator:	S3-Vision964
Bus Available:	32-Bit PCI 32-Bit VLB
Display Memory:	2MB or 4MB VRAM
Video Connector:	DB-15
Video Signal:	Analog

COMPATIBLE DRIVERS SUPPORT:

MS-Windows 3.x	Microstation 4.0, 5.0
MS-Windows NT 3.5	Lotus 1-2-3 Release 2.x
MS-Word (DOS) 5.0	WordPerfect 5.1
OS/2 v2.1, 3.0 Warp	CADKEY/DataCAD
Autodesk ADI 4.2	CADVANCE 3.51
AutoCAD 11, 12	VersaCAD 7.0
AutoShade 2.1	Generic CADD 6.0
3D Studio 1.0, 2.0	

Fully vesa support. Also Available: Japanese and Chinese MS-Windows Drivers.

SPECIFICATION:

Accelerator:	TRIO32 (S3-732)
BUS Available:	32-Bit PCI
Display Memory:	1MB exp 2MB DRAM
Video Connector:	DB-15
Video Signal:	Analog

SPIDER WEB: FEATURES

- Resolution, Color, Refresh Rate Change
- Refresh Rate And Resolution On-The-Fly
- Virtual Screen: Pans And Zooms
- Monitor Centering And Adjustments
- Refresh Rate Check
- Gamma Correction Utility
- Power Management Compliance To DPMS (Green PC)
- OnLine Help Menu

COLORS AND RESOLUTION

1MB Display Memory

RES	COLOR	REF
640x480	256 to 64K	60, 72, 75
640x480	16M (24 BPP)	60
800x600	16 to 64K	56, 60, 72, 75
1024x768	16 to 256	60, 70, 75, 87i
1280x1024	16	60, 72, 75
Additional Modes for 2MB		
640x480	16M (32 BPP)	60
1024x768	64K	87i
1280x1024	256	60

*All cards tested by CMP-Windows Magazine DEc 1994 on Dell's 90MHz Pentium PCI System.

We Bring Accelerator Powers to You

(Retailers Please Call (408) 526-0535 for Your Distributors)
BBS (408) 526-1219
End-Users Please contact your favorite retailer
or call SPiDER Graphics for nearest dealer.

PRODUCTS AVAILABLE!

SPiDER 32 Series (The Most Affordable)
SPiDER 256 Cache (Video Caching Graphics Card)
SPiDER 64 (1MB to 4MB Expansion)
Tarantula Lite (Affordable PCI Card)
Tarantula 64 (The Affordable High-End)

SPiDER® Graphics, Inc.

580 CHARCOT AVE., SAN JOSE, CA 95131 • (408) 526-0535

All trade names referenced are the service mark, trademark, or registerd trademarks of their respective manufacturers. SPiDER reserved the right to change specifications without notice. © Copyright SPiDER Graphics, Inc. Designed by TranDesign, San Jose, CA (408) 999-0943

LOWEST PRICES
SAME DAY
SHIPPING

VISA

AMT INTERNATIONAL

2393 QUME DRIVE, SAN JOSE, CA 95131
TEL (408) 383-9044 FAX (408) 383-9047, 944-9801

LOWEST PRICES
SAME DAY
SHIPPING

MasterCard

QUANTITY PRICING FOR DEALERS & VARS, PLEASE CALL!!

INTEL CPU CHIPS

• PENTIUM 100 MHz	$725
• PENTIUM 60/66/75/90 MHz	278/320/335/539
• 486DX-4 100 MHz	280
• 80486DX-33 MHz	129
• 80486DX-50 MHz	$259
• 80486DX2-50 MHz	145
• 80486DX2-66 MHz	188
• 80486SX-25 MHz	74
• 80486SX-33 MHz	105

A.M.D. CPU CHIPS

•80486DX-33MHz	$150
•80486DX-40 MHz	179
•80486-2-50 MHz	189
•80486-2-66 MHz	165
•80486-2-80 MHz	180
•80486-4-100 MHz	195

CYRIX CPU CHIPS

• CX 486DX-33	$119
• CX 486DX-40	125
• CX 486DX2-50	129
• CX 486DX-50	219
• CX 486DX2-80	139
• CX 486DX2-66	125

MEMORY UPGRADES - DUE TO THE RAPIDLY CHANGING PRICES CALL FOR THE LATEST PRICES!

SIMMS

IBM TYPE

1x9-60 3 Chip	$40
1x9-70 3 Chip	39
1x9-80 3 Chip	37
1x9-80/70/60 9 Chip	39/40/41
1x9-10	32
4x9-70	139
4x9-80	137
4x9-60	141

MAC TYPE

1x8-100 8 Chip	$32
1x8-80 2 Chip	35
1x8-70 2 Chip	35
1x8-80/70 8 Chip	35
2x8-80/70	92
4x8-80/70	124
16x8-80/70	CALL
Mac IIfx 4/16 MB Kit	CALL
256K VRAM	CALL
512K VRAM	CALL
16/32/64/128MB Kits for Quadra 700/900 & Mac IIfx, ci	CALL
NEW 72 PIN SIMM for MAC LCII & CENTRIS	CALL

72 PIN SIMMS (36 BIT)

256Kx36-80/70	$40/49
512Kx36-80	79
512Kx36-70	85
1x36-70	165
1x36-60	168
2x36-80/70/60	320/325/330
4x36-70/60	515/522
8x36-70 NEW	1050

32 BIT SIMMS ALSO AVAILABLE

DRAMS

DRAMS

256x1-80	$1.49
256x1-100	1.39
256x1-120	1.29
256x4-60/70/80	4.99
64x4-80/100	3.59
1x4-80 DIPP	39
1MBx1-70	4.99
1MBx1-80/60	4.99
SOJ	CALL

ZIPPS

64x4-10/12 Page, 18pin	$6.00
256x4-80/70 Page, 20pin	7
256x4 Video Page 28pin TC524256Z-70	9
256x4 Video 28pin TC524256Z-60	8
1x4-80/70 Page 20pin ZIPP	23
1x4-80/70 Page 20pin DIPP	32

CACHE MEMORY

32Kx8-20	$6.99
32Kx8-15/12	7.99
64x4-20	5
64x4-15	5.50
8Kx8-20	2.75
8Kx8-15	3
16Kx4-20	2.75
16Kx4-15	3.50
64x1-20	6.75
64x1-15	9.50
128x8-20	25
128x8-25	23

MATH CO's

INTEL/CYRIX/ULSI

287-10	$29
8087-1/2/3	89/69/59
287XL Intel Tube	49
387SL Intel Tube	49
387SX-26/20/33	49
387SX-25 Cyrix	39
387SX-33 ULSI	34
387DX-20 Intel Tube	36
387DX-25 Intel Tube	35
387DX-33 Intel Tube	45
387DX-40 Cyrix/IIT	39
4167-25/33 Weitek	200/375

CALL FOR PRICING ON IIT, ULSI & WEITEK

LASER PRINTER MEMORY

Price includes Memory, Board & Installation Instructions

IBM LASER

4019/4019E 1/2/3.5 MB	$89/129/179
4029 (All Model) 4 MB	179

EPSON LASER

6000-2/4MB	$135/215
7000-1/2/3 MB	125/149/189
Action LaserII-2/3/5 MB	159/205/299

HP LASER

HPII/IID 2/4 MB Board	$135/219
HP 4/4M 4/8MB	185/345
HP IIP,IIP+,III,IIID,IIIP 1/2/3/4	85/135/155/220
IIsi 4/8 MB	179/345
DeskJet 500/500c 550C 256K	85
Design Jet Plotter 4 MB	185

PANASONIC LASER

KXP4410/KXP4430 1/2/3/4 MB	$95/135/175/235
KXP4420/4450/4451 1/2/3/4 MB	95/139/185/245
KXP4450 1 MB	119
KXP4455 2 MB	139

OKI LASER

OL400 1/2 MB Board	$109/139
OL800/820 2/4 MB Board	139/229
OL810 2/3/4 MB Board	159/189/229

QMS LASER

PS 410 2/3/4 MB	$149/195/225
PS 860, 1700 1/4/8 MB	89/133/179
PS 815, 825, 815MR, 2/4/6	168/232/295

SHARP LASER

9500PS 1 MB	$75
JX-9500/9700 1/1.5/2.5/4	110/135/175/245

OTHERS

Apple Laserwriter II/IINT/IINTX 4 MB	$235
Brother HL-4 2/3/4 MB	145/182/235
Brother HL-8E V 1/2 MB	99/139
Compaq Pagemarq 15 & 20 1/4/8	79/139/266
Kyocera F800, F800Am F800T 2/4	95/137
NEC Silentwriter 90/290	109/124
NEC Silentwriter 95 2 MB	109
TI Microlaser 1 MB	98
Packard Bell Video Memory 1 MB	39

NexGen NX586 Motherboard w/CPU

Pentium Class Processor

P100	$850
P90	625
P80	499

MEMORY BOARDS

• RAMpAT 16 Bit	$85
• RAMpAT Plus	$125
• SIMMply RAM for PS/1 16 Bit	149
• SIMMply RAM	159

TEAC FLOPPY DRIVES

1.44 MB	$45
1.2 MB	49
Dual Floppy 1.2/1.44	129
Heat Sink w/Fan For 486's/Pentium	10/18

COMPAQ MEMORY

Model		P/N	
LTE 286	1 MB	117081-001	$89
	2 MB	117081-002	125
	4 MB	117081-003	219
SLT 286	1/4 MB	110237-001	99/259
LTE 386S/20	2 MB	12125-001	129
	4 MB	121125-002	195
Contura Lite 20/25	2 MB	129769-001	125
	4 MB	129769-002	235
	8 MB	129769-003	395
Portable 386	1 MB	107651-001	125
	4 MB	107653-001	310
Portable III2 MB		10-7332-001	125
	EBD	167811-001	225
SLT 386	2 MB	118304-001	145
	4 MB	118305-001	225
Deskpro 386S (E. Board)			
	4 MB	11364-001	285
	4 MB	112534-001	189
Deskpro 386/33L, 486/33L, 50/25			
	2 MB	115144-001	145
	8 MB	116561-001	375
	32 MB	116568-001	1475
Deskpro 386/20e, 25e (E. Board)			
	4 MB	113645-001	285
Deskpro 386/20,20e,25e			
	4 MB	113132-001	199
Deskpro 286N, 386N, 386SX/20, 386/25M, 486/33M, 486S/25M, 486S/16M			
	2 MB	118689-001	189
	4 MB	118690-001	345
	8 MB	128877-001	395
Deskpro 486/33L, 486/50L, 386/33L			CALL
Prolinea 3/255 & 3/252S			
	2 MB	141738-001	135
	8 MB	141742-001	315
Prolinea 4/33	2 MB	141682-001	125
	4 MB	141684-001	189
	8 MB	141685-001	345
Other Models			CALL

TOSHIBA MEMORY

T8500, T5200	2/8MB	$129/449
T5100, T3100, T1600	2 MB	139
T3100SX	2/4 MB	135/199
T3200SX, SXC	2/4 MB	125/199
T4400SX, SXC, T6400	2/4 MB	135/249
T4500/4600/4800, T1900/1910, T1950/C 3.3 Volts	8/16 MB	395/769
T3300SL	2/4/6 MB	135/210/299
T3100	2 MB	135
T2200SX, SXE, T1000LE	2/4/8MB	135/210/379
T1800 Satelite	2/4/8 MB	135/210/379

NEC MEMORY

Prospeed 286, 386SX/16	1/2/4 MB	$125/185/269
Prospeed 386	2/4 MB	189/475
Prospeed SX/20	1/4 MB	125/249
Powermate 386/25S	2/8MB	139/369
Powermate 486/25E, 486/33I	2/8 MB	135/365
Powermate Express Series	1/4/16 MB	135/225/689
Other Models		CALL

NOTEBOOK MEMORY

AMIGA 4000	4/8 MB	$169/310
Altima LSX2/	4 MB	165/249
AST Premium Exec	1/4 MB	95/195
AST Power Exec 3/25	4/8/16 MB	CALL
Compaq Contura Lite 20/25	2/4/8 MB	135/245/395
Chaplet Notebook	2/4 MB	155/249
Chicony 386SX	4 MB	198
Chicony 386SL/25	2/4 MB	149/229
DECPC 320P	2/4/6 MB	195/269/389
DELL 320N & 212N	1/2 MB	99/125
DELL 320N, NC	2 MB	139
DELL 325N, NC	2 MB	179
DELL NL25, NL20	2 MB	179
Epson NBS3	1/4 MB	98/225
Everex Tempo LX	2 MB	135
HP 95LX	1/2 MB	159/279
IBM L40SX, N33/SX	2/4/8 MB	99/189/389
IBM N51SX & SLC	1/4/8 MB	99/155/299
IBM PS/2 N45 Sl	2 MB	179
MAC PB 160, 180	6/10 MB	249/425
MAC PB 140, 170	2/4/6 MB	89/175/229
MAC PB 100	2/4/6 MB	89/179/239
Magnavox Metalis 386SX	4 MB	199
NEC Ultralite 286F	1/4 MB	99/199
Packard Bell 386SX	1/4 MB	99/229
Panasonic CF 170/270/370	1/2 MB	85/129
Sharp PC 8501	2 MB	135
Sharp 678/6881	2 MB	129
Sampo NB SX/26, SX/25	2/4 MB	145/225
TI Travelmate 2000	1 MB	129
TI Travelmate 3000	2 MB	135
TI Travelmate 4000	4 MB	229
Zenith Turbosport 386 E	1/4 MB	125/325
Zenith Supersport SX	2 MB	189
Zenith Mastersport	2 MB	189

IBM PS/2 & PS/1 MEMORY

PS/1 286/386SX	2/4 MB	$135/225
PS/1 Consultant Essential/Expert	1/2/4/8 MB	79/125/189/320
386 Valuepoint	2/4/8 MB	99/179/325
486 Valuepoint	4/16 MB	189/595
PS/2 30-286	2 MB	129
50Z, 55SX, 65SX, 70	2/4 MB	99/179
40SX, 35SX,35SL	2/4 MB	99/179
70A21, A61, 121	2 MB	135
80-11, 121, 311	4 MB	245
95, 90, P75, PS/1 Pro	2/4/8 MB	135/129/335
16 Bit Exp Bd For 50, 50Z, 60, 65SX	0K	179
32 Bit Exp Board for all 70 & 80 models	0K	189
RISC 6000	16/32/64 MB	745/1490/2890
Other Models		CALL

AST MEMORY

Bravo 3/33(LC) 325S	2/8 MB	$120/325
Bravo 486/25 & 4/33	2/8 MB	135/345
Bravo 486LC	4/8/16 MB	189/325/595
Cupid-32 Board	0K	239
Premium 386C	4 MB	189
Premium SE 450	4 MB	189
Premium 386/25, SX,33,486/25	1 MB	75
Premium II 386, 486	1/4 MB	85/189
Executive Notebook	4 MB	189
Other Models		CALL

CALL FOR UPGRADING OF PRINTERS & OTHER SYSTEMS

ALL MODELS/ALL MAKES

TERMS AND CONDITIONS

1. Gov't, University And Qualified Firms PO'S Welcome
2. U.S. and International Shipping VIA UPS, DHL and Federal Express
3. All Sales Must Include Sales Tax
4. All Sales Must Be C.O.D. Cashier/Certified Checks
5. There Is A 15% restocking Charge For All Refused Merchandise
6. Prices Subject To Change W/O Notice, Not Responsible For Typo's
7. Call For Latest Prices
8. 30 Day Warranty on 486 CPU's Call For Pentium Warranty

HOURS: MON-FRI 9am - 5pm

Intel Pentium 75/90/100 MHz 540MB 8MB Opti Viper PCI

- Intel Pentium 75/90/100 MHz CPU. CPU Cooling Fan
- SUPERMICRO P54CI USA Made MotherBoard Opti Viper Chipset PCI 256KB Cache Support 120MHz & Overdrive for P54C & P54CS
- 8MB 72-Pin Simm 70ns (up to 64MB)
- 540MB Enhanced IDE 12ms Hard Drive
- 15" SVGA .28DP Flat Screen Monitor
- S3 864 PCI Graphic Accelerator w/1MB DRAM 16.8 Million Max Color Display
- 1.44MB Floppy Drive
- KeyTronic 101 Enhanced Keyboard
- Mouse w/ Pad
- On Board PCI EIDE.Controller 4HD
- 2 Serials & 1 Parallel Port
- Med Tower Case w/ 230 Watts

intel inside pentium

$ 1599 / 1829 / 1999
75MHz 90MHz 100MHz

Intel Pentium 60/75/90/100 850MB 16MB Triton PCI

- Intel Pentium 64-bit 60/75/90/100 MHz CPU Cooling Fan
- Asus Intel Triton PCI Motherboard w/256KB (up to 512KB) Cache (Intel Mercury ChipSet for 60MHz)
- 16MB 72-Pin Simm 70ns (up to 128MB)
- 850MB 10ms IDE Hard Drive
- 15" SVGA .28 Flat Screen Monitor
- Diamond Stealth 64 PCI 2MB DRAM 16.8 Million Max. Color
- Teac 1.44MB Floppy Drive
- MaxiSwitch 101 Enhanced KB
- Microsoft Mouse w/ Pad
- PCI EIDE Controller 4HD/2FD
- AT-IO w/ 2 Serials (16550 UART) & 1 (EPP&ECP)Parallel Port
- Med Tower Case w/ 230 Watts
- Ask for the upgrade option for EDOMemory & Pipelined Burst SRAM

intel inside pentium

$ 1939 / 2139 / 2349 / 2499
60MHz 75MHz 90MHz 100MHz

486-33/40/66/80/100 32-Bit VLB 4MB 420MB HD

- 486-33SX/33DX/40DX/66DX2/80DX2/100DX4
- VLB 256KB Cache Memory Motherboard
- 4MB Simm 70ns (up to 64MB)
- 420MB 12ms Enhanced IDE Hard Drive
- 14" SVGA Non-Interlace 1024x768 0.28mmdp SVGA Color Monitor
- Trident 9440 VLB Graphic Accerator W/1MB(up to 2MB) 1280x1024 & 16.8M True Color
- 1.44MB Floppy Drive
- Mitsumi 101 Enhanced Keyboard
- Microsoft Compatible Mouse w/ Pad
- VESA Local Bus Enhanced IDE Controller w/ 2 Serials, 1 Parallel, & 1 Game Ports
- Mini Tower Case w/230 Watts Power Supply
- CPU Fan+HeatSink for 50,66,100 MHz system
- **Upgrade to PCI Version add $49**

$ 929 /969 / 979 / 999 / 1049 /1099
SX33 DX33 DX40 DX2-66 DX2-80 DX4-100

486 33/66/100 MHz 540MB SCSI 8MB PCI

- 486-33DX/66DX2/100DX4
- ASUS S3PG PCI Local Bus ISA 256KB Cache Memory Motherboard
- 8MB Simm 72-Pin 70ns (up to 128MB)
- 540MB 11ms Fast SCSI2 Hard Drive
- 14" SVGA 1024x768 Non-interlace 0.28mmdp SVGA Color Monitor
- Diamond Stealth 64 PCI w/1MB DRAM
- 3.5" 1.44MB Floppy Drive
- Keytronic 101 Enhanced Keyboard
- Microsoft Mouse w/ Pad
- 2 Serials, 1 Parallel
- NCR PCI Bus Mastering SCSI II Controller
- Med Tower Case w/230 Watts Power Supply
- CPU Fan+HeatSink for 50,66 MHz system

$ 1349 / 1399 / 1499
DX33 DX2-66 DX4-100

Monitors

Impression 14" 1024 .28 I / NI/ 72Hz Green	$219/229/269
Impression 7 17" 1280 .28 (MAG DX17 OEM)	$599
KFC 14" SVGA 1024 .39I / .28I / .28NI Green	$195/215/225
KFC 15" SVGA Color Ana/Digi. 1280 .28 NI	$299/339
KFC 17" SVGA Ana / Digi 1280 .26 NI	$619/669
Samsung 15GL 1280 .28/17GL 1280 .26	$349/739
ViewSonic	
ViewSonic 6E NI 1024x768 .28	$265
ViewSonic 15G/1572Hz NI MPR II	$389/429
ViewSonic 17E / 17G / 17 76Hz	$679/$719/839
ViewSonic 20G / 21G 1600x1280 Flat	$1299/1649
SONY 15SF 1280x1024 0.22	$439
SONY 17" SF / GDM-SE1 1600x1280 .25	$855/$989
SONY 20" GDM-SE .30	$1829
NEC	
NEC 14" 2V	$339
NEC 15" 3V/ XE / XP	$449/549/675
NEC 17" XE / XP	$1039/1259
NEC 21" XE / XP 1024/5FGp 1280 Flat	$1999/2499
MAG 15" MX15F / DX15 1280x1024 0.28 Flat	$439/349
MAG 17" MX17FG / DX17 1280x1024 0.26 Flat	$769/649
MAG 17" MXP17 1600x12800 .26	$895
MAG MX-21F 1600x1280 .28 Flat	$1699
NOKIA	
Nokia 449E 15" 1024	$479
Nokia 447L/447X 17" Trintron .25	$679/979
Nokia 21" 445X .26 1600	$2599

Video Cards

Trident 9000(512K) / 8900D(1MB) ISA 1024x768	$42/$59
Cirrus Logic ISA Accerator w/1MB	$65
Trident 9440 VLB/PCI Graphic Accerator w/1MB	$78/85
S3 864 64-Bit PCI Graphic Accerator w/1MB	$99
Genoa 8500VL 24-Bit Accerator w/1MB	$95
Number 9 GXe 64 2MB PCI/VLB	$239
Matrox PCI/2 Plus 1600X1200	$539
ORCHID	
Orchid Fahrenheit 64 VLB,PCI 1MB/2MB DRAM	$155/195
Orchid Kevlin EZ VLB 1MB	$99
Orchid Kelvin 64 VLB,PCI 1MB/2MB DRAM	$149/$189
Diamond SpeedStar Pro VLB ISA 1MB	$95
Diamond Stealth 64 VLB,PCI 1MB/2MB DRAM	$145/189
Diamond Stealth 64 VLB,PCI 2MB/4MB VRAM	$289/439
Diamond Viper Lite VLB,PCI w/2MB VRAM	$279
ATi	
ATI Mach32 VLB,PCI 1MB/2MB DRAM	$125/175
ATI Mach32 VLB,PCI 2MB VRAM	$239
ATI WinTurbo 64 PCI,VLB 2MB VRAM	$289
SPiDER Graphics, Inc.	
Spider Widow Plus 1MB/2MB	$179/249
Spider 32VLB Plus 1MB/2MB	$109/159
Spider 64VLB/PCI 2MB/4MB	$199/299
Hercules	
Hercules Dynamite Pro VLB 1MB/2MB DRAM	$169/219
Hercules Dynamite Pro PCI 2MB	$240

Multimedia

CREATIVE CREATIVE LABS, INC.	
Creative Lab Omni 4X SCSI	($409)
Creative Lab Value CD MultiMedia Kit	($239)
Creative Lab Discovery CD New Ed. 16 MultiMedia Kit	($275)
Creative Lab Digital SchoolHouse MultiMedia Kit	($279)
Creative Lab Game Blaster CD 16 MultiMedia Kit	($349)
Creative Lab Discovery 16 CD 4X MultiMedia Kit	($419)
Creative Lab Multimedia Home 4X MultiMedia Kit	($439)
SoundBlaster Pro Value Ed.	$69
SoundBlaster 16 Value Ed.	$92
SoundBlaster 16 MCD /ASP	$139/175
SoundBlaster 16 SCSI 2 /ASP	$169/189
SoundBlaster AWE 32 Value Ed.	$225
SoundBlaster AWE 32	$269
VideoBlaster RT300	$339
WaveBlaster II	$149
Creative TVCoder External	$149
SoundBlaster 16 SCSI & Toshiba 3501 Quad CD-ROM *Creative Lab SoundBlaster 16 SCSI-2 Sound Card w/ St. Speakers *Toshiba 3601 Quad Speed Int. SCSI2(150ms,660KB/s) CD-ROM *Microsoft Encarta,Works,Golf,BaseBall,Money,Sampler CD Title	($499)
SoundBlaster 16 SCSI & NEC CDR-510 3X CD-ROM *Creative Lab SoundBlaster 16 SCSI-2 Sound Card w/ St. Speakers *NEC CDR-510 3X SCSI CD-ROM (195ms,450KB/s) *Microsoft Encarta CD	($339)
Diamond 5000 Multimedia Kit w/ Quad Speed CDROM	($425)
Diamond 6000 Multimedia Kit SOHO	($375)
Diamond 4000 Multimedia Kit w/4X CDROM	($339)
Diamond 3000 Multimedia Kit	($375)
MEDIA VISION	
Media Vision MV1100 Multimedia Kit w/Double Speed CD	($209)

Printers & Scanner

HEWLETT PACKARD	
*DeskJet/DeskWriter 540	$279/295
*DeskJet 1200C / 1200PS(Special!)#	$959/1549
*LaserJet 4L/4ML	$499/999
*LaserJet 4+ / 4M+	$1369/1889
*ScanJet IIcx / IIIp (Special!)#	$888/489
Canon	
*BJC-600E/4000 Color Inkjet	$479/379
*BJ200E / BJ230 360dpi	$249/369
OKIDATA	
*OL400e 300dpi / OL410e 600dpi	$389/585
*OL410e/PS 600dpi Post Script 2MB	$789
EPSON	
*Stylus Color InkJet 720DPI	$519
MICROTEK	
*ScanMaker II PC/Mac 600	$539/545
*ScanMaker IISPX PC/Mac	$899/899
*ScanMaker III PC/Mac	$2549/2549

Motherboard

ASUSTek	
*486 Sis VLB 256 SV2GX4	$135
*486 Intel PCI/VLB 256 AP4	$155
*486 Sis PCI/VLB 256 SP3 EDIE/IO	$165
*486 Intel PCI 256 SP3G SCSI2/IDE/IO	$259
*Pentium Sis PCI 60/66 256 P5SP4 EIDE/IO(16550)	$219
*Pentium Sis PCI 75/90/100 256 P54SP4 EIDE/IO(16550)	$255
*Pentium Intel Triton PCI 256 75/90/100 P54TP4 EIDE/IO(16550)	$299
SuperMicro	
*Pentium Opti Viper PCI 75/90/100/120 P54CI EIDE 256	$239
*Pentium Intel Triton PCI 75/90/100/120/133 P55CWS EIDE w/VRM 256	$289
Intel	
*Pentium Plato PCI 75/90/100 256 EIDE/IO	$309
*Pention Saturn PCI 60/66 256 EIDE/IO	$219

Mass Storage

COLORADO	
*Colorado 350MB Int / Ext	$175/345
*Colorado 700 680 MB Int / Ext	$239/399
*Colorado 1400 1.4GB int.	$349
*PowerTape PT 1GB / 2GB SCSI Int.	$575/939
CONNER	
*Tape.Stor 420MB Int/Ext Wide-QIC	$169/325
*Tape.Stor 850MB Int/Ext Wide-QIC	$275/399
*Tape.Stor 4GB SCSI Int/Ext W-QIC	$499/625
HEWLETT PACKARD	
*JetStore DAT Tape 2000i/5000i	$1049/1189
*JetStore DAT Tape 6000i	$1649

Call For Current Hard Drive Price

Maxtor IBM CONNER Seagate

CDROM & Modem

*USRobotics 14.4 FaxModem Int/Ext	$95/115
*USRobotics 28.8 FaxModem Int/Ext	$219/239
*USRobotics 28.8/14.4 PCMCIA	$389/189
*Practical Peripherals 14.4 Fax Int/Ext	$115/139
*Supra 14.4 FaxModem Int/Ext	$85/119
*Supra 28.8 FaxModem Int/Ext	$189/209
*Zoltrix 14.4K FaxModem Int/Ext	$65/95
*Zoltrix 28.8K FaxModem Int.	$99
*Zoltrix 14.4K Voice/Fax/Data Int	$79
*DSI SoftModem 19.2K FaxModem Int.	$99
*DSI SoftModem 19.2K Voice/Fax/Data	$119
*DSI Scout 28.8K Internal FaxModem	$189
*DSI Scout Classic 14.4K Ext FaxM	$109
*NEC 3Xi Internal SCSI/OEM	$289/199
*NEC 4X Internal SCSI	$309
*Plextor 3028 Internal SCSI DS	$239
*Plextor Internal SCSI 4X Speed	$329
*Sony 55E DS IDE Int. CDROM	$119
*Toshiba 3601 SCSI2 int.CDROM	$309
*TEAC 4 Speed Internal CDROM	$185

AiM Computers

1741-C Clayton Road, Concord,CA 94520
TEL: (510) 687-2822
FAX: (510) 687-5276
Internet: aimcomp@ccnet.com
Hours: Mon-Sat 10-6:30

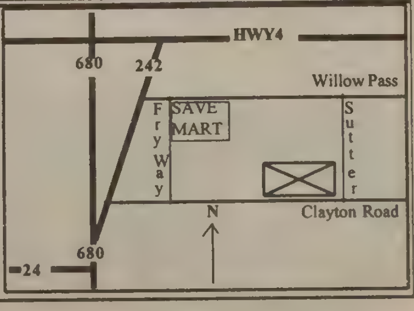
FREE *Internet* for System Purchases

AiM Quality Guarantee

*** Lifetime Labor & 1 Year Parts**
*** 72 Hours Burn-In**
Extended Warranty Service Available
On-Site Service Repair Available
Delivery & Setup Available
Financing & Leasing Available

Prices subject to change without notice
Not responsible for typographical errors
Trademarks are registered by the respective companies
Contents subject to change without notice
** Limited warranty, see store for detail
# Limited Quantity only

May 1,'95 (C)



PENTIUM 100 MHz 8 MB RAM PCI INTEL MOTHERBOARD	$1538	MOTHERBOARD/CPU $1158
PENTIUM 100 MHz 8 MB RAM PCI	$1388	MOTHERBOARD/CPU $998
PENTIUM 90 MHz 8 MB RAM PCI INTEL MOTHERBOARD	$1308	MOTHERBOARD/CPU $918
PENTIUM 90 MHz 8 MB RAM PCI INTEL CHIP SET	$1228	MOTHERBOARD/CPU $828
PENTIUM 90 MHz 8 MB RAM PCI	$1208	MOTHERBOARD/CPU $808
PENTIUM 75 MHz 8 MB RAM PCI	$998	MOTHERBOARD/CPU $598
PENTIUM 60 MHz 8 MB RAM PCI	$878	MOTHERBOARD/CPU $478
AMD Processor 486DX4-100 PCI/VLB/IS 256K CACHE SYSTEM	$578	MOTHERBOARD/CPU $328
AMD Processor 486 DX4-100 VESA LOCAL BUS 256K CACHE SYSTEM	$568	MOTHERBOARD/CPU $288
INTEL Processor 486 DX4-100 VESA LOCAL BUS 256K CACHE SYSTEM	$658	MOTHERBOARD/CPU $388
INTEL Processor VESA LOCAL BUS 486-66DX2 256K CACHE SYSTEM	$548	MOTHERBOARD/CPU $268
AMD Processor VESA LOCAL BUS 486-66DX2 256K CACHE SYSTEM	$518	MOTHERBOARD/CPU $238
AMD Processor VESA LOCAL BUS 486-80DX2 256K CACHE SYSTEM	$528	MOTHERBOARD/CPU $258
INTEL Processor VESA LOCAL BUS 486-33 256K CACHE SYSTEM	$508	MOTHERBOARD/CPU $228
VESA LOCAL BUS 486SX-33 256K CACHE SYSTEM	$468	MOTHERBOARD/CPU $198
VESA LOCAL BUS 486SX-25 256K CACHE SYSTEM	$458	MOTHERBOARD/CPU $188

BASIC SYSTEM CONFIGURATION:

- 4MB RAM Expandable Except Pentium (Pentium-8 MB) (Pentium - 8MB/386 1MB)
- IDE 2FD/2HD Controller
- 101 Key Mitsumi Keyboard
- Teac 1.44 MB Floppy Drive
- 2 Serial, 1 Parallel, 1 Game Ports (Exp. Pentium)
- Mini-Desk Top or Mini Tower Case
- Power Supply
- One Year Warranty

LIFETIME LABOR WARRANTY ON SYSTEM!

486 VLB MULTIMEDIA COMPLETE SYSTEM

PACKAGE INCLUDES:

- Motherboard w/256K Cache
- 4 MB RAM
- 420 MB Hard Drive
- Mini Tower or Mini Desktop Case
- Panasonic CD-ROM Model 562
- Media Magic Sound Card
- Teac 1.2 and 1.44 MB Floppy Drive
- 14" SVGA 1024x768 .28mm NI Color Monitor
- SVGA Card w/1MB (S3 Chipset)
- IDE Controller (2S/1P/1G)
- 101 Keyboard
- 25W Speakers
- Microsoft Compatible Mouse

CALL FOR OTHER CONFIGURATIONS & OPTIONS

486DX-33 MHz	$1218
486DX2-66 MHz Intel	$1258
486DX2-80 MHz AMD	$1238
486DX4-100 MHz AMD CPU	$1278

VIDEO CARDS

ATI Pro Turbo 2MB/4MB PCI/VLB OEM	$295/509
ATI Ultra Pro VLB 2MB OEM	259
ATI Ultra Pro 2MB ISA/PCI VRAM OEM	259/259
ATI Ultra Plus 2MB DRAM PCI/VLB OEM	159
ATI Graphics Wonder 1MB DRAM PCI OEM VLB	109
Diamond Stealth 64 2/4MB VLB or PCI	285/429
Diamond Stealth 64 1/2MB DRAM VLB	129/179
Diamond Stealth 64 1/2MB DRAM PCI	129/169
Diamond Speedstar Pro VLB	89
#9 GXE 64 PCI 1/2MB	185/259
#9 GXE 64 Pro 2/4MB	359/529
ORCHID Kelvin 64 1MB	129
GENOA VESA LOCAL BUS	89
S3 VLB 1MB	79
ET 4000 1024x768 NON-INT.	79
Trident VLB/PCI 1MB	79/85
Trident VGA (1024x768) 1MB	65
GENERIC Monochrome Graphics w/Printer Port	17

DRIVE CONTROLLERS

IDE Controller w/2S/1P/1G	$19
IDE w/2S/1P/1G High Speed Serial	45
Enhanced IDE VLB 2S/1P	39
IDE I/O VLB 2S/1P	25
IDE I/O VLB Hi-Speed Serial	49
Adaptec SCSI 1542C w/software	175/239
Adaptec SCSI 2742T EISA w/Floppy & Software (14 SCSI Devices Support)	365
Adaptec 2940 SCSI PCI	215
Adaptec 2940W Wide SCSI PCI Kit	275
Adaptec VLB 2842VL w/Software	215
8 Bit SCSI Card	49
Promise Caching VLB Controller	
DC-420 512K Upgradable 1MB	95
DC-4030 to 16MB	105
EIDE 2300 Plus 4HD/2S (16550)/1P	59

I/O CARDS

AT I/O (2S 16550/1P/1G) Hi-Speed	$39
AT-I/O (2S/1P/1G)	15
Printer Card	12
Game Card	12

KEYBOARDS

Microsoft Natural Keyboard	$89
Keytronic 101	35
Mitsumi 101	29
Acer 101 Keyboard (clicking)	35
MAXISWITCH 101 Keyboard	35

MONITORS

IDEK MF8617 17" 1280X1024	$765
NANAO	
F2.15 15"	499
F.217 17"	879
F2.17 Ex 17" 1600x1280	919
T2.17TS 17"	999
T2-17 17"	1285
T2-20 20"	1955
KFC 17" Flat Screen .26 Digital Cont	685
VIEWSONIC	
21PS 21" 1600x1280 .26	1669
20PS 20" 1600x1280 .28NI	1449
17" 1280x1024 .28NI	849
17G 17" 1280x1024 .28NI	749
15" 1280x1024 NI	409
V6E Non-Int 14"	265
15" SVGA 1280x1024	320
SVGA NI 1024x768 .28 (2 Yr. Warr. GVC)	220
VGA Mono	109
NEC Monitors	CALL
14" Flat Screen Mono (Amber)	85
SONY	
15SF 15"	429
17SF	869
GDM20SE 20"	1835
NOKIA	
449E (15") 80 Hz Refresh	499
447B (17")/TCO	935
447X	1059
445x (21") 1600x1280	2485
Hitachi 15" CM1586	369

MODEMS & FAX/MODEMS

24/96 Fax Modem (Send/Receive)	$35
14400 Fax Modem V.42 Int/Ext	55/95
14.4/14.4 Voice/Fax/Modem	79
28.8/14.4 Modem/Fax V.34	129
US Robotics Sportster	
14.4/14.4 Fax/Modem Int	99
14.4/14.4 Fax/Modem Ext	119
14.4/28.8 Fax/Modem Int V.34	229

TAPE BACK-UP

COLORADO Tape Back-Up 250MB	$149
350MB DJ-35C	169
DC-2120 Tape Cartridge For Above	16
DC-2120 Tape Cartridge Formatted	18
DC 2/20 XL for DJ-350	20
CONNER 420MB Tape Back-Up(w/One Tape)	179
850MB	269
Trakker 250MB	279

DISK DRIVES

All HD Come with Mounting Bracket

TEAC 1.2 MB	$46
3.5" (1.44 MB) w/Frame	40
1.2, 1.44 MB Combo Drive	89
MAXTOR	
7546A 12ms	215
CONNER	
420MB	175
850MB	265
1 GB MB SCSI	499
1.2GB IDE	389
QUANTUM	
540MB 14ms	195
420MB	175
540MB SCSI	229
730MB	245
Western Digital	
WDAC-2540 527 MB 11ms	219
WDAC 1.2 GB IDE	389
SEAGATE, CONNER, QUANTUM LARGER CAPACITY DRIVES	CALL

NETWORK CARDS

Ethernet 16 Bit	$36
10 BT /16 Bit	36
Ethernet Combo 16 Bit	55
3 COM	
3C509 TP/Coax	119/119
3C509 Combo	135
3C590 Combo PCI Single/5 Pak	175/755
3C590TP Single/5 Pak	149/629
3C595TX (100MB) Single/5 Pak	249/1195
SMC Elite Plus TP/Coax	119/119
Intel Etherexpress Combo	129

U.P.S.

550 VA	$179

COMPUTER CASE

14" Baby AT Case W/ 200W P/S	$59
17" Baby AT Case W/200W P/S	79
Vertical Case 250W P/S	119
Medium Vertical Case 250W P/S	95
Mini Vertical Case 200W P/S (UL P/S)	69
Mini Vertical Case 200W P/S	49
Mini Medium Case (UL P/S)	69

POINTING DEVICES

Logitech Cordless	$85
Logitech Bus Mouseman	64
Logitech Mouseman Combo	49
Logitech First Trackball	44.95
First Mouse	30
Mouse (Serial 9 Pin)	9
Microsoft Mouse Bus/Ser (400dpi)	85/75
Microsoft Mouse (OEM) White Ser/Bus w/System Purchase Only	35/65

MISC.

Windows NT	$315
Windows For Workgroups (w/System purchase only)	65
MS DOS 6.2 (w/System only)	45
6/10/15/25' printer cable	3.50/6/10/20
Keyboard Extension cable	5
Monitor Extension cable	5
Keyboard Drawer/Under Table	27/18
Computer floor stand	7.95
Power Center	18
Printer switch box (AB/ABCD)	9.50/19
Printer switch box auto (AB/ABCD)	18/35
Power supply 220W	48
Memory Chips (DIPS/SIPPS/SIMMS)	CALL
Math Co-Processors	CALL
Disk Box	7.50
Power Strip	7
Keyboard Rest	3.50

PRINTERS

HP Laser Printer	CALL

CALL FOR LATEST PRICES!

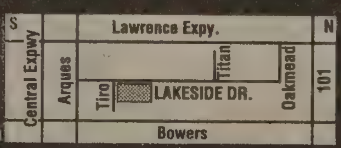
AROMA
Computer Systems
Always Ready to Offer More Assistance

470 LAKESIDE DR., Suite F
SUNNYVALE, CA 94086
Tel: (408) 736-4355
FAX: (408) 736-4356

Prices Subject To Change w/o Notice
Prices Good At Sunnyvale Store Only

M-F 9-7
Sat 10-4

EMAIL:
aroma@megamed.com



MODESTO OFFICE:
3430 Tully Rd., Suite #21
Modesto, CA 95350
Tel: (209) 525-8080
FAX: (209) 525-8120

YOUR ONE STOP MULTIMEDIA Source

WE MATCH OR BEAT ANY ADVERTISED CD SOFTWARE PRICE!

CD-ROM SOFTWARE TITLES WITH HARDWARE PURCHASE PRICES

REFERENCE

20TH CENTURY VIDEO-SPORTS MPC	$10.99
A-PLUS: EDUCATION OF MATH & SCIENCES DOS	11.99
ACES OVER EUROPE	19
ACES OVER PACIFIC	19
AMER. HERIT. TALKING DICTIONARY MPC/MAC	15.50
AMERICAN BUS PHONE BOOK 1994	12.99
AMERICAN BUS PHONE BOOK 1995	15.99
AMERICAN RESIDENTIAL PHONE BOOK 1994	18.50
ARIS WIZARD MPC (MAC)	10
AUTO ALMANAC 1995 MPC	9.95
BETTER HOME HEALTHY COOKING MPC/MAC	13
BIBLE LANDS, BIBLE STORIES MPC	19
BIBLE LIBRARY (9 BOOKS +20 REF)	19
BODY WORKS VER. 3.0 MPC	29.95
CIA WORLD FACT BOOK DOS	9.95
COMPLETE ALGEBRA MPC	14
COMPTON'S INTERACTIVE ENCYCLOPEDIA 1995	25
COMPUTER FRIENDLY PLUS DOS	13.99
DESERT STORM MPC (MAC)	12
EASY CHINESE COOKING VOL. 1 MPC	14.95
ELECTRONIC COOKBOOKS.	12
FAMILY BIBLE MULTIMEDIA VER 1.0 MPC	17.50
FAMILY DOCTOR 3RD ED., MPC	16
FORBIDDEN SUBJECTS VOL. 1	18
GARDENING	7.95
GROLIERS ENCYCLOPEDIA 6.0 MPC	26.50
GROLIERS PREHISTORIA MPC	15
HOLY BIBLE 1994	15.95
INFOPEDIA	21.99
INTERNATIONAL INTELLIGENCE FACTBOOK	15
K-12 PLUS: SOURCE OF EDUCATION DOS	11.99
KEY GOURMET MPC	12
KEY HOME GARDENER MPC	13.99
LANGUAGE OF THE WORLD MPC	15
LEARN TO SPEAK ENGLISH	30
LEARNING FLY FISHING MPC	15
MAGICIAN SECRET CARDS VOL 1 MPC/MAC	16
MATHEMATICS LIBRARY MPC	12
MAVIS TEACHES TYPING MPC V3.0	12.99
MAYO CLINIC: ANATOMY MPC	15.99
MAYO CLINIC: FAMILY HEALTH BOOK	15
MAYO CLINIC: FAMILY PHARMACIST	19
MAYO CLINIC: SPORTS HEALTH & FITNESS MPC	18
MAYO CLINIC: THE TOTAL HEART	16.99
MAYO CLINIC: VIRTUAL BODY MPC	15.99
MELTING POT COOKBOOK (4000+RECIPES)	12
MICROSOFT BOOKSHELF 1994 MPC	25
MICROSOFT CINEMANIA MPC	29
MICROSOFT DANGEROUS CREATURES MPC	25
MICROSOFT ENCARTA 1995	39
MICROSOFT FRANK LLOYD WRIGHT MPC (R)	33
MICROSOFT MUSICAL INSTRUMENTS MPC	27
MICROSOFT'S COMPLETE BASKETBALL MPC	37
MICROSOFT THE ULTIMATE ROBOT MPC (R)	37
MID-SCHOOL SUITE (MATH & GRAMMAR) MPC	13.99
MONARCH NOTES MPC	17
MULTIMEDIA US HISTORY MPC	19
MULTIMEDIA WINDOWS SPANISH MPC	13.99
NEWSWEEK INTERACTIVE VOL 2	14.99
OPERATION DESERT STORM MPC	12
OUR SOLAR SYSTEM	7.95
PARENTING	14.99
PHONE DISC 94 BUS & RES (R)	68.99
PHONE DISC 94 BUSINESS (R)	43.99
PHONE DISC 94 RESIDENTIAL	43.99
PLAY & LEARN THE BIBLE	14.95
PRO PHONE: DIRECT PHONE MPC (R)	69.99
PRO PHONE: SELECT PHONE MPC (R)	135
QUICK AND EASY SPANISH MPC	17
REFERENCE LIBRARY BY STW DOS	12
RUSSIAN AIR POWER MPC	12
SHARK ALERT MPC	15.99
SPORTS ILLUSTRATED 1994	12
STREET ATLAS USA MPC (R)	75
SUPER SONIC MPC/MAC	19
THE FIRST EMPEROR OF CHINA MPC/MAC	15
THE HOLY BIBLE 1994	15.95
TIME ALMANAC 1994 DOS	15
TOTAL BASEBALL DOS (MAC)	10.99
U.S. AIR FORCES AIRCRAFT MPC	12
U.S. AIR POWER MPC	12
U.S. AIRCRAFT CARRIERS DOS	12
U.S. AIRCRAFT WEAPONS DOS	12
U.S. AMPHIBIOUS ASSAULT DOS	12
U.S. BATTLE TANKS DOS	12
U.S. BATTLESHIPS & CRUISERS MPC	12
U.S. BOMBERS MPC	12
U.S. DESTROYERS & FRIGATES MPC	12
U.S. FIGHTER JETS MPC	12
U.S. HISTORY MULTIMEDIA MPC	19
U.S. MARINE CORPS MPC	12
U.S. MILITARY HELICOPTERS MPC	12
U.S. NAVAL WEAPONS DOS	12
U.S. NAVY & MARINE AIRCRAFT MPC	12
U.S. NAVY SHIPS MPC	12
U.S. SEA POWER DOS	12
U.S. SPY PLANES DOS	12
U.S. SUBMARINES MPC	12
USA WARS: CIVIL WAR DOS (MAC)	19
USA WARS: KOREA DOS (MAC)	19
USA WARS: VIETNAM DOS (MAC)	19
USA WARS: WWII DOS (MAC)	19
WEBSTER'S ENCYCLOPEDIA	16.99
WEEKEND HOME PROJECTS MPC	17.50
WIZARD MPC/MAC	10
WORLD HISTORY MULTIMEDIA MPC	19.50
WORLD OF FLIGHT MPC	16
WORLD OF TRAINS MPC	16

GAMES FOR CHILDREN

3 FT. 6 PAK VOL. 1 (5CD'S)	$24.95
A TREE THROUGH THE SEASONS MPC	9.95
ALADDIN & ACTIVITY CENTER BY DISNEY MPC	24.99
ALLIE'S PLAYHOUSE MPC (R)	39.99
ALWAYS ARTHUR MPC/MAC	9.95
ARTHUR'S BIRTHDATE MPC	35
ARTHUR'S TEACHER TROUBLE MPC	14.50
BEAUTY AND THE BEAST MPC	7.99
BIRDS AND HOW THEY GROW	9.95
BUSTERS FIRST THUNDER MPC/MAC	9.95
BUTTERFLIES BY DISCIS MPC	8.99
CAT CAME BACK MPC	12.99
CARMEN SANDIEGO? JUNIOR MPC	26.99
CD FUN HOUSE DOS	10.99
COOL SCHOOLHOUSE (4 CDS)	25
CINDERELLA AND AESOPS FABLES	8.99
DON QUIXOTE MPC	12
FAMILY EDUCATION COLLECT DOS	16
FOREVER GROWING GARDEN	16.50
GUS GOES TO CYBERTOWN MPC/MAC	9.95
HARRY & THE HAUNTED HOUSE MPC	34.99
HARRY STORY DISC & COLOR BOOK	10.99
HEATHER HOME RUN & STOMACH ACHE MPC	8.99
INTERACTIVE STORYTIME VOL1/2/3	12/12/12
JURASSIC ABC DOS	14.99
JUST GRANDMA & ME	14.99
KID'S ZOO/UNDERSEA & AMERICAN ADVENTURE	19.99
KINDERVENTURES: WANDEROOS GO EXPLORING	9.99
KINDERVENTURES: WANDEROOS GO TO TOWN	9.99
LION KING BY DISNEY MPC	29.99
LITTLE MONSTER AT SCHOOL MPC	35
MACMILLAN DICT FOR CHILDREN	15
MAGIC SCHOOL BUS: HUMAN BODY MPC	34.95
MAGIC SCHOOL BUS: SOLAR SYSTEM MPC	34.95
MARIO'S EARLY YEARS (FOR PRESCHOOL) MPC	12
MATH WORK SHOP MPC	38
MAVIS TEACHES TYPING FOR CHILDREN MPC	17
MAYO CLINIC: SAFETY MONKEY MPC	15.99
MAYO CLINIC: WELCOME TO BODYLAND MPC	15.99
MERRIAM WEBSTER'S DICTIONARY FOR KIDS	17.99
MICROSOFT CREATIVE WRITER MPC/MAC	37
MICROSOFT EXPLORAPEDIA MPC	33
MICROSOFT FINE ARTIST MPC/MAC (R)	33
MIXED-UP MOTHER GOOSE MPC	10
MONKEY BARS	14.99
MULTIMEDIA LEARNING FUN HOUSE DOS	15
NEW KIDS ON THE BLOCK	35
OREGON TRAIL (2 CD'S) MPC	14
PAPER BAG PRINCESS & MUD PUDDLE	8.99
PETER & WOLF BY E BOOK MPC	12
PLAY 'N' LEARN FOR KIDS MPC	11.99
PLAY ROOM MPC	35
PLAYING WITH LANGUAGE (ENGLISH)	17
PLAYING WITH LANGUAGE (FRENCH)	17
PLAYING WITH LANGUAGE (GERMAN)	17
PLAYING WITH LANGUAGE (JAPANESE)	17
PLAYING WITH LANGUAGE (SPANISH)	17
POWER RANGERS MPC/MAC	14.99
PUTT-PUTT & FATTY BEARS ACTIVITY PAK	19.95
PUTT-PUTT JOINS THE PARADE DOS	14
QUANTUM CASTLE MATH: ADD & SUBTRACT	9.99
RUFF'S BONE	35
SCARY POEMS BY DISCIS MPC/MAC	8.99
SING AN AMERICAN STORY MPC	14.99
SING-A-LONG AROUND THE WORLD MPC	10.99
SING-A-LONG FOR CHILDREN	10.99
SINK OR SWIM DOS	10
SLEEPING BEAUTY MPC	10.99
SOMEBODY CATCH MY HOMEWORK	8.99
SPIDERS BY DISCIS MPC	8.99
THE TALE OF BENJAMIN BUNNY MPC/MAC	8.99
THE TORTOISE & THE HARE	35
THINKING GAMES AROUND THE WORLD OF DOS	12
TOP 201 LEARN GAMES DOS	11
TREASURE MATH STORM! MPC/MAC.	39.50
TUNELAND MPC (R)	22.95
VIDEO CASINO GAMES MPC	14.99
WHALES BY DISCIS MPC	9.95
WHAT AIR CAN DO MPC	9.95
WHO WANTS ARTHUR MPC/MAC	9.95
WIGGINS IN STORYLAND	16.50

ANIMALS & NATURE

AUDUBON'S BIRDS MPC (MAC)	$14
AUDUBON'S MAMMALS MPC (MAC)	14
BUTTERFLIES OF THE WORLD MPC	12
DINOSAUR ENCYCLOPEDIA	14
DINOSAUR SAFARI	9.99
MICROSOFT DINOSAURS MPC	25
NAT'L GEO MAMMALS DOS	16
OCEAN'S BELOW MPC	12
SAN DIEGO ZOO/ANIMALS MPC	9.99

GAMES

3D WORLD BOXING+5 EXTRA GAMES DOS	$11.99
3D WORLD TENNIS+5 EXTRA GAMES DOS	11.99
AD&D DARK SUN I: SHATTERED LANDS	18
AD&D DARK SUN II: WAKE OF THE RAVAGE	18
AD&D MENZOBERRANZAN: RULE BOOK	18
AD&D RAVEN LOFT: STRAHDS' POSSESSION	18
AEGIS GUARDIAN OF THE FLEET DOS	22
ALIEN LOGIC	17.95
ALONE IN THE DARK DOS (R)	17.99
ARIS VIDEO CUBE MPC	9.99
BENEATH A STEEL SKY DOS (R)	37
BETRAYAL AT KRONDER DOS	19.95
BIG RED ADVENTURE	19.95
BLOWN AWAY MPC	18.50
BLUE FORCE	13.99
BLUE MAX: ACES OF THE GREAT WAR	9.99
CAMPAIGN	17.50
CARMEN SAN DIEGO DELUXE DOS	14.50
CD MEGAPACK (6 CD'S)	29
CENTRAL INTELLIGENCE (3 LANGUAGES)	24
CHALLENGE PACK-GAME PACK III	14.99
C.H.A.O.S. CONTINUUM	11.99
CHESS MASTER 4000 TURBO MPC	16
COMMANDER BLOOD DOS.	18.50
CORRIOR 7 DOS	16.99
CRITICAL PATH DOS	16.50
CURSE OF ENCHANTIA DOS	21.99
CYBER RACE	14.50
CYBERIA (PENTIUM) DOS	26.50
CYCLONES	17
DAEMOS GATE (WITH VHS TAPE) DOS	15
DARK FORCES DOS (R)	49.95
DARK LEGIONS	17
DARKSEED	16.50
DAWN PATROL	21
DAY OF THE TENTACLE	17
DEATHSTAR ARCADE BATTLES	7.95
DOOM II DOS	45
DRACULA UNLEASHED MPC/MAC	18
DRAGON LORE DOS (2 CD'S)	22
DRAGON'S LAIR DOS	25
DRAGONSHERE DOS	24.99
DREAM WEB DOS	18.50
DUNE DOS	15
DUNGEONS AND DRAGONS (ADVANCED) DOS	19.99
EA ENTERTAINMENT PAK (ADVANCED) DOS	22
EA FANTASY PAK (4 GAMES) DOS	22
EA KIDS PAK (4 GAMES) DOS	22
EA SPORTS PAK (4 GAMES) DOS	22
ECSTATIA DOS	23.50
F-117A DOS	17.99
FAMILY CHOICE/BRITANNICA DOS	15
FANTASY ADVENTURE PACK (3 GAMES) DOS	19.99
FIRST WAVE GAME PACK (5 GAMES)	25
FLEET DEFENDER:F-14 TOMCAT DOS	17.50
FRONTIERS ELITE II DOS	22.95
GABRIEL KNIGHT	19
GAME GALLERY (36 OLD TIME FAVORITES) DOS	22
GAME JAMBOREE	7.95
GEEKWAD	14
GREAT NAVAL BATTLES II: GUADALCANAL	11
HELL CAB VER 1.1	19.99
HELL: A CYBERPUNK THRILLER	18
HUGO'S HOUSE OF HORRORS	7.95
INCA II DOS.	19.95
INDIANA JONES	17
INDY CAR RACING DOS	19.95
INNOCENT UNTIL CAUGHT	17.50
INTERNATIONAL ATHLETICS DOS	12
INTERNATIONAL SOCCER DOS	15
INTERPLAY'S 10 YR ANTHOLOGY COLL	24.99
ISLE OF THE DEAD DOS	12.99
JACK NICKLAUS SIGNATURE EDITION DOS	15.50
JOURNEYMAN PROJECT MPC (R)	16.99
KING'S QUEST VI DOS	15
KING'S QUEST V DOS.	12
LANDS OF LORD MPC	19.95
LEGEND OF KYRANDIA MPC	14
LEGEND OF KYRANDIA II (HAND OF FATE)	19
LEGEND OF KYRANDIA:BOOK 3 (R) MP	29
LEISURE SUIT LARRY 6 DOS	18
LINKS:SOLID GOLD EDITION (R)	18
LITTLE DIVIL DOS (R)	24.99
LODE RUNNER DOS/MPC/MAC	19.50
LORD OF THE RINGS DOS	17
LUNICAUS MPC	17
MAD DOG MACREE II (THE LOST GOLD) DOS	16
MAELSTROM:GALACTIC STRATEGY GAME DOS	16.95
MAGIC CANDLE III DOS	9.99
MAGIC DEATH VIRTUAL MURDER 2	10.99
MAN ENOUGH DOS	19
MEGA RACE	12.99
MICROCOSM DOS	15.99
MICROSOFT GOLF MPC	17
MYST MPC	25
NASCAR RACING DOS	22.99
NOCTROPOLIS (MATURE 17+) DOS	53
NOVA STORM (3D FLIGHT SIM) DOS	26
OUTPOST BY SIERRA MPC	20
PANZER GENERAL	18
POLICE QUEST IV DOS	19.95
POWER HITS MOVIES DOS	23
POWER HITS SCI-FI DOS	21
POWER HITS SPORTS DOS	21
PROTOSTAR	13.99
PSYCHOTRON MPC	18
QUANTUMGATE	17
REBEL ASSAULT	23.95
RETURN OF THE PHANTOM DOS	26.99
RETURN TO ZORK	16
RING WORLD DOS	13.99
RISE OF THE ROBOT DOS	23
SAM & MAX HIT THE ROAD MPC	32
SECRET WEAPONS/LUFTWAFFE DOS	11.50
SENTO & CREEP CLASH (2 GAMES/1 CD)	25.99
SIMM CITY ENHANCED DOS	18.99
SIMM CITY 2000	19
SPORTS PAK(FOOTBALL, SOCCER, TENNIS)	9.95
STAR CONTROL VOL. 1&2 DOS	15.50
STAR CRUSADER DOS	17
STAR TRACKS 25TH ANNIVERSARY	17
STAR WARS CHESS MPC	14.99
SUBWAR 2050 DOS.	19.99
SUPER HARRIS & MEG-29M SUPERFULCRUM	15.50
SYSTEM SHOCK (ENHANCED VERSION) DOS	39.95
T-2 & THE GRANDMASTER CHESS (2 GAMES)	9.99
TALE OF PETER RABBIT & HEATHER HOME RUN	8.99
THE 7TH GUEST MPC	18.50
THINKING GAMES MP	10.99
TORNADO DOS	15.99
UFO ENEMY UNKNOWN DOS	21.99
ULTIMATE DOMAIN DOS	16
UNDER A KILLING MOON (4CDS) DOS	49.95
US NAVY FIGHTERS (PENTIUM) DOS	49
VIDEO CUBE MPC	9.99
VIRTUAL VEGAS VOL. 1 MPC/MAC	17
VIRTUOSO (ENGL/DUTCH/FRNCH) DOS	23.95
WACKY FUNSTER	13.99
WHO KILLED SAM RUPERT?	13
WHO KILLED TAYLOR FRENCH MPC	13
WHO SHOT JOHNNY ROCK?	19
WING COMMANDER 2 PRIVATEER DOS	19.99
WING COMMANDER 3 (4CD'S) (R) DOS	45
WRATH OF THE GODS MPC	39.95

ARTS & MUSIC

A CHRISTMAS CAROL	$9.50
A HARD DAYS NIGHT (BEATLES)	14.50
BEETHOVEN'S 5TH SYMPHONY	19
FOUR SEASON'S MPC	7.99
GREAT LITERATURE PLUS MPC	17
JAZZ A MULTIMEDIA HISTORY	13
LEONARDO THE INVENTOR MPC/MAC	17.99
MICROSOFT MULTIMEDIA BEETHOVEN MPC	35
MICROSOFT MULTIMEDIA MOZART MPC	35
MICROSOFT MULTIMEDIA SHUBERT MPC	35
MICROSOFT'S ANCIENT LANDS MPC	22
MICROSOFT'S ART GALLERY (R) MPC	45
MIDI MUSIC SHOP PROFESSIONAL	15
RENAISSANCE MASTER II MPC	16
SURVEY OF WESTERN ART MPC	18
TWAIN'S WORLD MPC	18

SHAREWARE

CICA MS WINDOWS '94	$9.95
CRITICAL MISSION (TOP 100 GAMES)	9.95
DOOM FEVER (DOOM II ACCESSORIES)	15
DOOM MANIA/DOOMIA II #1	7.99/7.99
ENCYCLOPEDIA OF SOUND/VOL2	7.95
GAMES EXPERT VOL 1 VER 1.0	9.95
NEW KIDS EDUTAINMENT #1	7.99
PC-SIG 11TH EDITION DOS	10
PC-SIG 13TH EDITION DOS	17
QUICK TOONS DOS	10.99
SO MUCH SHAREWARE IV	7.99
SUPERTOONS DOS	10.99
TECHNO TOOLS	7.95
THE BEST OF 101 GAMES 1/2	7.99/7.99
TOO MANY TYPEFONTS	7.95
WINDOWSWARS	7.95
WINDOWS EXPERT VOL. 1	9.95
WOLF 3D MANIA	7.99

BUSINESS

MICROSOFT WORKS MPC V 3.0 & MONEY MPC	$29
PLANIT EARTH MPC	15
Q&A SYMANTEC DOS 4.0	15
QUICKEN 4.0 '95 FOR WINDOWS MPC	35
SYSOPS PLUS	15

DESKTOP PUBLISHING & IMAGES

ARIS DEEP VOYAGE	$11
ARIS JETS & PROP MPC (MAC)	12.99
COREL DRAW 5 COMPANION (2CD'S)	35
HALO DESKTOP IMAGER MPC	12
KODAK PHOTO CD ACCESS MPC	10
MORPHOLOGY 101 MPC	17.95
OCEAN DIGITAL IMAGERY VI MPC	17
PRETTY WOMEN MPC/MAC	12
WILD PLACES DOS/MAC	9
WORLD VIEW DOS/MAC	9

ATLAS & TRAVEL

ADVENTURE MPC	$14
A.A.A. TRIP PLANNER MPC	15
GREAT CITIES-VOL 1 & 2 DOS	14
GREAT CITIES VOL 2 MAC	10
US ATLAS V4.0 MPC	9.99
USA NATIONAL PARKS MPC/MAC	15
WHO KILLED BRETT PENANCE? MPC	13
WORLD ATLAS 5.0 MPC	10
WORLD TRAVELER VOL 1	7.95

CD COMBO PACKS

CD DELUXE 4: (ATLAS, CHESS, TYPING)	$14.95
CD DELUXE 5 (MM, WA,MMT,RL,CDC)	22.99
CMC CLASSIC COLLECTIONS (4-CDS)	15
MARIO IS MISSING/WORLD ATLAS 3.2	15
MEGA PAK 2 (11 CD-ROMS)	29
MICROSOFT BUSINESS PAK (3-CDS, 2 DISKS)	65
MICROSOFT POWER PAK (5-CDS, 2 DISKS)	85
TOP CD GAMES (10 CDS)	33.99

ADULT TITLES IN STOCK

FOR MORE INFO SEE US ON OUR WEB PAGE: http://www.megamed.com/aroma/aroma.html

AROMA
Computer Systems
Always Ready to Offer More Assistance

470 LAKESIDE DR., Suite F
SUNNYVALE, CA 94086
Tel: (408) 736-4355
FAX: (408) 736-4356
Prices Subject To Change w/o Notice
Prices Good At Sunnyvale Store Only

M-F 9-7
Sat 10-4

EMAIL:
aroma@
megamed.com

CD TITLES MONTHLY SALE!

COME IN AND CHECK IT OUT

$5.99 OR $10.99

YOUR ONE STOP NOTEBOOK & MULTIMEDIA Source

CD-ROM

PANASONIC 562 (MATSUSHITA)	$125
NEC 4X QUAD SPEED INTERNAL	295
SANYO 2X SCSI CD-ROM	145
TOSHIBA XM3601 4X (SCSI) INTERNAL	295
TEAC 4X CD-ROM (DRIVE ONLY)	175
MITSUMI 4X IDE CD-ROM (DRIVE ONLY)	185

REAL MAGIC LITE PLAYS CD FEATURE FILMS ON PC	$265
MEDIA MAGIC ISP 16 SOUND CARD	65

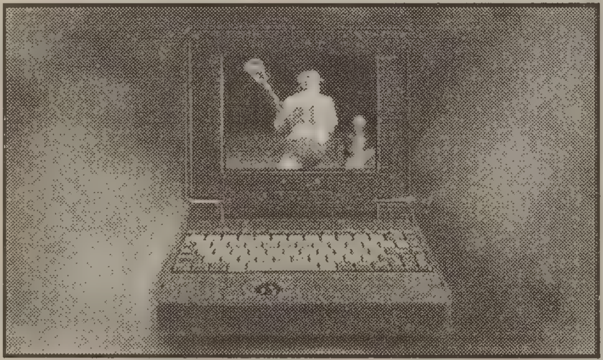
CREATIVE

CREATIVE LABS, INC.

MULTIMEDIA PRODUCTS

SOUND BLASTER AWE 32	$269
SOUND BLASTER PRO 16 BASIC (RETAIL PACKAGE/OEM)	90/75
SOUND BLASTER 16 MCD/16 SCSI/16 SCSI (OEM)	139/169/110
SOUND BLASTER 16 MCD/ASP 16 SCSI/ASP	169/199
SPEAKERS 25 WATT/80 WATT	39/59

SMART PENTIUM NOTEBOOK



STANDARD FEATURES:

- 8 MB RAM (EXPANDABLE TO 16/24/40 MB)
- 540 MB REMOVABLE HARD DRIVE
- 1.44 MB FLOPPY DRIVE
- 32 BIT VLB W/1 MB DISPLAY
- LCD/EXTERNAL MONITOR SIMULTANEOUS DISPLAY
- SUPPORTS 1280X1024 OR 1024X768 X 256 COLORS
- PCMCIA 2 TYPE II OR 1 TYPE III SLOTS
- PARALLEL/1 SERIAL PORT
- BUILT-IN TRACK BALL MOUSE
- BUILT-IN MICROPHONE AND SPEAKER
- DOCKING STATION OPTION
- 6.4 LBS

UPGRADES:

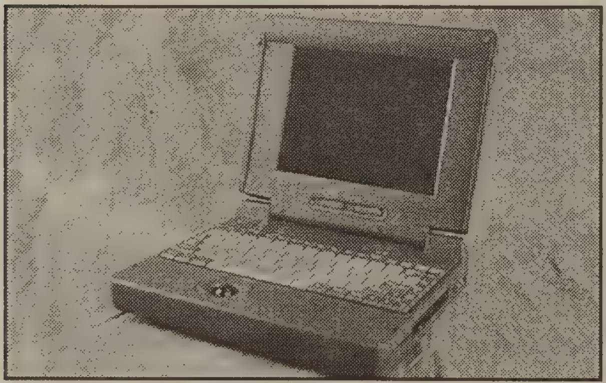
8 MB RAM	$395
16 MB RAM	$800
32 MB RAM	$1495

ACCESSORIES:

PCMCIA FAX/MODEM	$149
PCMCIA ETHERNET COAX/UTP	$159
BATTERY	$135
DOCKING STATION	$430

DISPLAY/SPEED	PENTIUM 75 MHz	PENTIUM 90 MHz	PENTIUM 100 MHz
DUAL SCAN	$2598	$2808	$2988
ACTIVE MATRIX	$3278	$3488	$3668

486 VESA LOCAL BUS MULTIMEDIA NOTEBOOK



STANDARD FEATURES:

- 4 MB RAM (EXP 8/12/20/36 MB)
- 340 MB REMOVABLE HARD DRIVE
- 1.44 MB FLOPPY DRIVE
- 32 BIT VLB W/1 MB DISPLAY
- LCD EXTERNAL SIMULTANEOUS DISPLAY
- SUPPORTS EXTERNAL 1024X768
- 2 TYPE II OR 1 TYPE III PCMCIA SLOT
- 1 PARALLEL/1 SERIAL PORT
- BUILT-IN TRACKBALL MOUSE
- BUILT-IN SPEAKER & MICROPHONE
- DOCKING STATION OPTION
- 6.2 LBS (MONO) 6.6 LBS (COLOR)

UPGRADES:

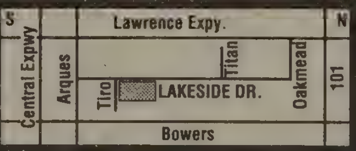
540 MB HDD	Add $130	8 MB	Add $360
4 MB	Add $180	16 MB	Add $695

DISPLAY/ CPU TYPE	MONO	DUAL SCAN	ACTIVE MATRIX
486DX-33	$1338	$1798	$2398
486DX2-66	$1378	$1838	$2438
486DX4-100	$1498	$1968	$2568

AROMA
Computer Systems
Always Ready to Offer More Assistance

470 LAKESIDE DR., Suite F
SUNNYVALE, CA 94086
Tel: (408) 736-4355
FAX: (408) 736-4356
Prices Subject To Change w/o Notice
Prices Good At Sunnyvale Store Only

M-F 9-7
Sat 10-4
EMAIL:
aroma@
megamed.com



MODESTO OFFICE:
3430 Tully Rd., Suite #21
Modesto, CA 95350
Tel: (209) 525-8080
FAX: (209) 525-8120

WHY BUY FROM ANYONE ELSE...WHEN YOU CAN BUY FROM THE BEST–

UNIVERSAL COMPUTER PRODUCTS

FREE
mouse pad with
mouse purchase

1 YEAR PARTS/
1 YEAR LABOR
WARRANTY
ON ALL
SYSTEMS

486 Computer System w/256K

- 8MB RAM
- Teac 1.44MB 3.5" Floppy Drive
- 420MB IDE Hard Drive
- Local Bus IDE Controller
- 14" SVGA Monitor .28dp NI
- Local Bus Video Card w/1MB
- 101 Keyboard
- Mini Tower Case
- MS-DOS 6.22
- Serial Mouse w/Pad
- Double Speeed CD ROM Drive
- 16 Bit Sound Card
- Stereo Speakers w/12 Titles

DX-33	$1425
DX2-66	$1475

386 Computer System

- 4MB RAM
- 1.2MB & 1.44MB Floppy Drives
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Keyboard
- 200MB IDE Hard Drive
- SVGA Card
- 14" SVGA Monitor
- Mini-Tower or Desktop Case
- MS-DOS 6.22

DX-40
$900

REPAIR & UPGRADE SERVICES

ON IBM & IBM COMPATIBLES

- FULL SERVICE
- NO APPOINTMENT NECESSARY
- SAME DAY TURNAROUND
- COMPETITIVE RATES
- EXPERIENCED TECHNICIAN FOR OVER 8 YEARS
- COURTEOUS SERVICE

ADD ON BOARDS

AT I/O Card 2S,1P,1G	$20
Mono Graphic/Printer	$20
IDE Dual HD/FD Cont	$20
SCSI 1:1 HD/FD Cont	$99
VGA Card w/256K	$40
Trident SVGA w/1MB	$65
C-Logic VLB SVGA w/1MB	$90
NCL 538 Controller	$50
NCL 539 Controller	$50
SMC Combo Ethernet Card	$119
Trident VLB SVGA w/1MB	$85
Diamond VLB Video w/1MB	$125
PCI VGA Card w/1MB	$125
Adaptec 2842A SCSI Controller	$285

CASES AND POWER SUPPLY

Baby AT w/250 Power	$70
Baby Tower w/250 Power	$65
Mid Tower w/250 Power	$85
Full Tower w/280 Power	$160
250W Power Supply	$50
200W Power Supply	$50
230W Power Supply	$50

PRINTERS

Citizen 190GX (9 Pin)	$175
Citizen GSX230 (24 Pin)	$239
Citizen GSX240 (24 Pin)	$299
Citizen Color Upgrade Kit	$49
Toner KX-P450	$39.95
Toner KX-P453	$38.95
Toner KX-P451	$39.95
HP 51604A	$11.95
HP 51626A	$25.95
HP 92261A	$11.95
HP 92274A	$59.95
HP 92275A	$68.95
HP 92295A	$77.95
HP 92298A	$99.95

MODEMS

Mitac 2400/9600 Int. Fax Modem	$50
Mitac 14,400 External Modem	$149
US Robotic 14,400 Int. Fax Modem	$99
US Robotic 14,400 Ext. Fax Modem	$129
US Robotic 14,400 Int. Modem	$110
US Robotic 14,400 Ext. Modem	$149

CD-ROM

CD ROM SPECIAL

Creative Labs Discovery w/18 Titles	Call
Creative Labs Digital SchoolHouse w/20 Titles	Call
Speakers	$10
Double Speed Int. CD ROM Drive	$135
Sound Blaster Pro Deluxe	$89.95
Sound Blaster 16 Basic	$119
Sound Blaster Multi CD	$149
Sound Blaster 16 SCSI-2	$179
MIDI Kit	$49

KEYBOARDS

Mitsumi 101 Keyboard	$35
Chicony Ergonomic Keyboard	$60
Chicony KB5181 Click Keyboard	$40
Focus 2001 Click Keyboard	$45
Keytronic Keyboard	$40

MEMORY CHIPS

DRAM	
256K-8/10	$1.25
256Kx4-8	$5.50
64K-10	$1
SIMM	
4MBx9-7	CALL
1MBx9-7/8	CALL
1MBx3-7/8	CALL
1MBx36-7	CALL
2MBx36-7	CALL
4MBx36-7	CALL

MONITORS

14" Monochrome	$95
14" SVGA Monitor 1024x768 .28dp	$230
14" SVGA Monitor 1024x768 .39dp	$200
14" SVGA Monitor 1024x768 .28dp NI	$240
15" SVGA Monitor 1280x1024 .28dp NI	$339/359
17" SVGA Monitor 1280x1024 .28dp NI	$CALL

MOTHERBOARDS

386DX-40MHz MB w/128K	$110
486DX-33MHz VESA w/128K	$Call
486DX2-66MHz VESA w/256K	$Call
586 Pentium 60MHz PCI w/256K	$Call
586 Pentium 66MHz PCI w/256K	$Call
586 Pentium 90MHz PCI w/256K	$Call

DRIVES

CONNER	
CFS 210A 213MB IDE	$169
CFS 420A 420MB IDE	$190
CFA 540A 540MB IDE	$210
CFP 1060S 1.06GB SCSI	$579
MAXTOR	
MXT 7290 290MB IDE	$185
MXT 7345 345MB IDE	$199
MXT 7540AV 540MB IDE	$210
SEAGATE	
ST 3243 214MB IDE	$169
ST 3491A 428MB IDE	$190
TEAC	
1.2MB 5.25"	$50
1.44MB 3.5"	$42
FRAME FOR 3.5"	$5

TAPE BACKUP

Colorado 120MB/250MB	$115/149
External Kit for Colorado Drive	$110
Colorado Jumbo Trakker 250 MB	$270

MOUSES

Trackball	$85
Logitech Serial Mouseman	$49.95
Microsoft Bus Mouse	$89
Microsoft Serial Mouse	$69
DEXXA Mouse	$25
Mouse Systems A3 Mouse for Mac	$50
Mouse Systems A3 Trackball for Mac	$50

PRINTER RIBBONS & DATA CARTRIDGES ARE AVAILABLE

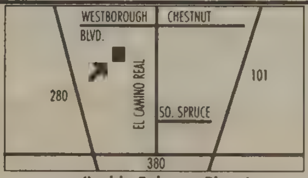
COAX & TWISTED CABLES ARE AVAILABLE

UNIVERSAL COMPUTER PRODUCTS

951 El Camino Real, South San Francisco, CA 94080
(415) 583-9736 Fax (415) 583-3457
Mon-Fri: 9am-6pm Sat: 10am-5pm

Prices subject to change w/o notice • Not responsible for misprints

VISA
MasterCard
DISCOVER



(Inside Fairway Plaza)

THE BEST PRICE IN TOWN!

586 Pentium®

100MHz . . . $1015
90MHz $840
75MHz $675

- Intel Pentium® Processor
- Heat sink & CPU fan
- 1MB Expandable to 128MB on board
- 256K Cache exp to 512K
- 1.2 or 1.44MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Tower or Desktop case w/power supply
- 101 Enhanced Keyboard

586 Pentium®

66MHz $595
60MHz $540

- Intel Pentium® Processor
- Heat sink & CPU fan
- 1MB Expandable to 128MB on board
- 256K Cache exp to 512K
- 1.2 or 1.44MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Tower or Desktop case w/power supply
- 101 Enhanced Keyboard

486DX4-100MHz

w/ AMD CPU . . $395
w/ Intel CPU . . $470

- Heat sink & CPU fan
- VESA Local Bus Motherboard
- 1MB Expandable to 32MB on board
- 8K Internal Cache
- 128K External Cache Exp to 256K
- Shadow RAM
- 1.2 or 1.44MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Tower or Desktop case w/power supply
- 101 Enhanced Keyboard

486DX2-80MHz

w/ AMD CPU & 128K Cache. . . $365

- Heat sink & CPU fan
- VESA Local Bus Motherboard
- 1MB Expandable to 32MB on board
- 8K Internal Cache
- 128K External Cache Exp to 256K
- Shadow RAM
- 1.2 or 1.44MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Tower or Desktop case w/power supply
- 101 Enhanced Keyboard

Optional For Systems

- 486 PCI/VLB Motherboard . . . . . . Add $[illegible]
- VESA IDE Card. . . . . Add $15
- VESA SVGA Card w/1MB . . . . . . Add $75
- Orchid Kelvin 64 VESA/PCI w/1MB/2MB RAM . . Add $125/170
- 14" Mono Monitor & Card . . . . $[illegible]
- SVGA Mon. (1024x768, .39) w/SVGA Card/512K . . . $[illegible]
- SVGA Mon. (1024x768, .28) w/SVGA Card/512K . . . $[illegible]
- 15" SVGA Monitor (1024x768, 0.28) w/1MB Card. . . . $[illegible]

NOVELL®

Sales...
Custom Design Service...
Installation and Maintenance...
Extended Software Support...

Available through
STEPFORD
1-800-HLP-U-NET

MULTIMEDIA

CD ROMS

Sony Double Speed w/AT Bus	**$120**
• 250ms access time	
Mitsumi 4Xi AT	**$190**
TEAC 4XI AT	**$190**
Toshiba 4XI SCSI 3601B	**$315**
NEC 4XI SCSI	**$315**
Toshiba 4XI SCSI External	**$415**

SOUND CARDS

Sound Blaster 16 (OEM)	**$80**
Sound Blaster 16 SCSI-2 (OEM)	**$120**

CREATIVE LABS UPGRADE KITS

Value CD 16 Kit......... **$260**

- Sound Blaster 16
- Speakers
- Double Speed CD-ROM
- 12 Titles

BELMONT SYSTEMS INC.

(Belmont Computer Products)

1555 Industrial Road, San Carlos CA 94070

(415) 598-9058
FAX (415) 598-0186
Store Hours: M-F 9-6
Saturday 10-3

PRICE IS NOT ALL WE OFFER:

BEST QUALITY•STRONGEST SUPPORT STAFF•8 YEARS BUSINESS EXPERIENCE

486DX2-66MHz

w/ AMD CPU . . $345
w/ Intel CPU . . $365

- VESA Local Bus Motherboard
- 1MB Expandable to 32MB on board
- 8K Internal Cache
- 128K External Cache Exp to 256K
- Shadow RAM
- 1.2 or 1.44MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Tower or Desktop case w/power supply
- 101 Enhanced Keyboard

486SX-33MHz

w/ Intel CPU & 128K Cache. . . $315

- VESA Local Bus Motherboard
- 1MB Expandable to 32MB on board
- 8K Internal Cache
- Shadow RAM
- 1.2 or 1.44MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Tower or Desktop case w/power supply
- 101 Enhanced Keyboard

486SLC2-66MHz

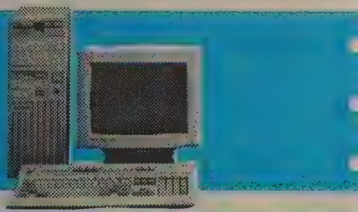
IBM 486 CPU & 64K Cache . . $290

- Motherboard manufactured in the USA by IBM
- 64K Cache
- 1MB RAM Exp to 16MB
- 1.2 or 1.44MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Tower or Desktop case w/power supply
- 101 Enhanced Keyboard

386-40MHz

w/ 128K Cache. $245

- 1MB expandable to 32MB on Board
- 128K Static Cache Memory
- Shadow RAM
- 1.2 or 1.44MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Socket for 80387
- Tower or Desktop Case w/power supply
- 101 Enhanced Keyboard



• 420MB	$170	• 850MB	$250
• 540MB	$185	• 1GB	$340
• 720MB	$240	• 1.2GB	$360

KEYBOARDS

101 Enhanced Keyboard	$19
Mitsumi 101 Key	29
Keytronic 101 Key	35
Maxiswitch 101 Key	35

FLOPPY DRIVES

TEAC/Mitsumi 1.2MB	$55
TEAC/Mitsumi 1.44MB 3.5"	45

MODEMS

14,400 Modem, 14,400 Fax	$60
14,400/14,400 Ext	85
28,800 Fax/Modem	110
28,800 Fax/Modem V.34	145
28,800 Fax/Modem Ext	135

MONITORS

14" Flat Screen	$85
Super VGA (1024x768) .39	185
Super VGA (1024x768) .28	210
Non-Interlaced SVGA Monitor	220
15" Non-Interlaced 1280x1024	300
Viewsonic 15G	385
Viewsonic 15	415
Viewsonic 17G	710
Viewsonic 17	830
Mag 17" OEM 1280x1024 .28	600
Sony 15SF	435
Sony 17SF	875
Sony 17SE	925

INTERFACE CARDS

Mono Graphic Card	$15
VGA Card (16 Bit 800x600)	30
Trident SVGA Card (1024x768 512K)	40
Trident SVGA w/1MB RAM	60
Orchid Kelvin 64 PCI/VLB 1M/2M	135/180
VESA SVGA Card1MB	75
PCI SVGA Card1MB	85
Diamond SpeedStar Pro PCI/VLB	105
Diamond Stealth 64 PCI/VLB 2MB/4MB VRAM	280/425
Diamond Stealth 64 PCI/VLB 1M/2M DRAM	135/180
Hercules Dynamite PCI 2MB	215
#9 GXE 64 PCI or VLB 1M/2M	190/245
AT M I/O (2S, 1P, 1G)	15
AT M I/O w/16550 UART	30
IDE Card w/cable	15
IDE I/O w/16550 UART	35
VESA Enhanced IDE w/16550 UART	50
Adaptec 1522	90
Adaptec SCSI 1542CF	185
Adaptec 2940 PCI SCSI	220

HARD DISKS

420MB	$185
540MB	205
720MB	250
850MB IDE	265
1 GB	355
1.2GB	375
540MB SCSHI	235
1 GB SCSHI	495

MOTHERBOARDS

386-40MHz 128K Cache	$105
486SX-33MHz w/Intel CPU 128K Cache	180
486DX-33MHz w/Intel CPU 128K Cache	205
486DX2-66MHz w/CPU 128K Cache, CPU Fan	230
IBM 486SLC2-66MHz VESA	140
486DX2-80MHz w/CPU, CPU fan	250
486DX4-100MHz w/CPU	285
586-100MHz w/Intel CPU, CPU fan	890
586-90MHz w/Intel CPU, CPU fan	730
586-75MHz w/Intel CPU, CPU fan	570
586-66MHz w/Intel CPU, CPU fan	480
586-60MHz w/Intel CPU, CPU fan	450

MISCELLANEOUS

387SX	$25
387-25/33/40	35
230W Power Supply	48
Logitech Mouse Man	50
Logi Trackman	75
DFI Mouse (3 Button, Microsoft Comp.)	15
Mini Vertical Case w/PS	55
Med Vertical Case w/PS	75
Full Vertical Case w/PS	95
Conner 420MB Tape w/cartridge	185
Conner 850MB Tape w/cartridge	285
Colorado 250MB Tape Backup	155
Colorado 700MB Tape w/cartridge	285
Colorado Tracker 250MB	295
16 Bit Ethernet Card	40
WD SMC Elite Ethernet 16 Bit	110
3COM 3C509	120
RAM DIP/SIPP/SIMM	Call

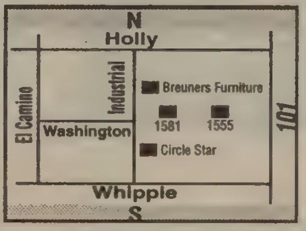
TERMS AND CONDITIONS:

- Company, Government PO's Welcome
- UPS Shipping Daily

All Prices and contents subject to change w/o notice.
All brand names are registered trademarks.
Co. Term on Credit approval.

Welcome to visit
our showroom!
Computers, Monitors
are now
on display!
Prices reflect Cash Discount.

Located in the
San Carlos Commerce
Center Office Park



ASA COMPUTERS, INC

National: (800) REAL-PCs (800) 732-5727
Silicon Valley, CA: (408) PCs-FOR-U (408) 727-3678
Pleasant Hill, CA: (510) 274-0784
Fax Orders and Enquiries: (408) 988 - 0359
Technical Support (408) 496 - 6853 Ex 215 Mon - Fri Only 9 - 5
Hours: Mon - Fri 8 - 5:00; Sat 11 - 4
2354 Calle Del Mundo, Santa Clara, CA 95054

Export-Quality System

Min Qty 10 reqd

486 VLB 256K Cache
Cyrix 486DX2-80 CPU
OPTI 895 Chip Set
(Runs all 486 and P24T CPUs)
Mini-Tower Case w/230W PS
4 MB RAM
IDE ISA Card w/2SPG
1.44 MB YE Data Fast FDD
SVGA ISA 512K Video Card
101 K/B (Most Languages)
(Some Language K/B Extra $$)
Serial Mouse
US Assembly and Testing
110V or 220V Testing
Export Quality Packaging

$453

THE ROADRUNNER PCs - Top Value, Performance & Compatibility

the HomeRunner	the SchoolRunner	the OfficeRunner	the TopRunner	the ProRunner
A486DX2-80 W/256K	A486DX4-100 W/256K	PentiumOC 66 MHz w/256K	PentiumE 90 MHz w/256K	DualPentium 90 MHz w/512K
Std Mini-Tower w/220W PS	Std Mini-Tower w/220W PS	Std Mini-Tower w/220W PS	Std Mini-Tower w/220W PS	Std Med Tower w/220W PS
4 MB RAM	4 MB RAM	8 MB RAM	8 MB RAM	16 MB RAM
VLB Enhanced IDE I/O	VLB Enhanced IDE I/O	PCI Enhanced w/Fast I/O	PCI Enhanced w/Fast I/O	PCI SCSI w/Fast I/O
1.44 MB FDD	1.44 MB FDD	1.44 MB FDD	1.44 MB FDD	1.44 MB FDD
540 MB HDD IDE	730 MB HDD IDE	850 MB HDD IDE	850 MB HDD IDE	1 GB Fast SCSI-2 HDD
VLB 1 MB SVGA Card	VLB 1 MB SVGA Card	PCI 1 MB SVGA Card	Diamond 64 PCI 2MB DRAM	Diamond 64 PCI 4 MB VRAM
14" SVGA Monitor	14" .28 NI SVGA Monitor	15" .28 NI Monitor	15" .28 NI Monitor	17" .26 1600x1280 Monitor
101 KeyBoard	101 KeyBoard	101 KeyBoard	KeyTronics K/B	KeyTronics K/B
Serial Mouse	Serial Mouse	Serial Mouse	LogiTech Mouse	MS Serial Mouse
9600/2400 SendFax/Modem	9600/2400 SendFax/Modem	14400 Fax/Modem Internal	144/288 Fax/Mod Int	144/288 Fax/Mod Int
SONY 2X CD-ROM	Quad Speed CD-ROM	Quad Speed CD-ROM	Quad Speed CD-ROM	Quad Speed SCSI CD-ROM
16 Bit Sound Card	16 Bit Sound Card	SoundBlaster 16	SoundBlaster 16	SoundBlaster 16
MS DOS 6.22 and Win 3.1	MS DOS 6.22 and Win 3.1	MS DOS 6.22 and Win 3.1	16 Bit Ethernet Coax+10BT	16 Bit Ethernet Coax+10BT
Gr. Ency, Mavis Typing Chess + 3 Titles	MS Works and Money	MS Office Pro 4.3	MS DOS 6.22 and WFW 3.11	MS DOS 6.22 and Win NT
$1,175	**$1,350**	**$1,795**	**$2,270**	**$4,695**

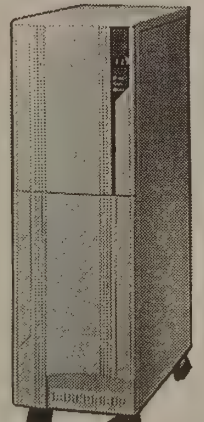
Export-Quality System

Min Qty 5 reqd

Intel Pentium 60 MHz CPU
256 External Cache
PCI/ISA Motherboard
CPU Heat Sink and FAN
Baby AT Case w/230W PS
8 MB RAM
IDE ISA Card w/2SPG
1.44 MB YE Data Fast FDD
SVGA ISA 512K Video Card
101 K/B (Most Languages)
(Some Language K/B Extra $$)
Serial Mouse
US Assembly and Testing
110V or 220V Testing
Export Quality Packaging

$779

The Thoroughbred Workstations



Hardware platform for Multiple Operating Systems... and Applications demanding Workstation Power... AutoCad, P-CAD, Windows NT

ASA... ...PCs that really fly on the Information Highway

System Pricing

TYPE OF SYSTEM	BUS Structure	BareBone: Motherboard Mini-Tower Case IDE w/2SPG 1.44 FDD 101 K/B Serial Mouse	Complete Systems: BareBone + 1 MB RAM IDE 270 MB 14" Mono SVGA VGA 256K Card	BareBone + 4 MB RAM IDE 420 MB 14" SVGA .39 SVGA 512K Card	BareBone + 4 MB RAM IDE 540 MB HDD 14" SVGA .28 SVGA 1MB Card	BareBone + 8 MB RAM IDE 730 MB HDD 14" SVGA .28 NI SVGA 1MB Card +1.2 Floppy	BareBone + 8 MB RAM IDE 850 MB HDD 15" SVGA .28 NI SVGA 1MB Card +1.2 Floppy	BareBone + 8 MB RAM IDE 850 MB HDD 17" .26 SVGA SVGA 1MB Card +1.2 Floppy
DualPentium90 256K	PCI	$1,596					$2,542	$2,830
PentiumE 100 w/256k	PCI, VLB	$967					$1,913	$2,200
PentiumE 90 w/256k	PCI, VLB	$801				$1,641	$1,747	$2,035
PentiumI 66 w/256k	PCI	$612			$1,189	$1,430	$1,536	$1,824
PentiumOC 60 256k	PCI	$463			$1,040	$1,282	$1,388	
A486DX4-100 w/256	ISA, VLB	$363		$869	$932	$1,167	$1,272	
C486DX2-80 w/256K	ISA, VLB	$293		$799	$862	$1,097		
A386DX-40 w/128K	ISA	$185	$468	$697	$749			
A386SX-40	ISA	$152	$435	$663				

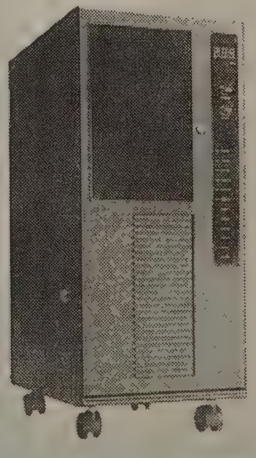
PCI Systems include PCI IDE Controller and CL5434 1MB PCI Graphic Card

VLB Systems include VLB IDE Controller and S3C805 1MB VLB Graphic Card

CPUs: A - AMD; C - Cyrix; I - IBM; I - Intel; Nx - NexGen

Bay Area On-Site Service Available

The Thoroughbred Servers



Outstanding Price Performance and Functionality for Application and Networking Servers

MOTHERBOARDS & CONTROLLERS

ISA/EISA MOTHERBOARDS

THE STALLION SERIES

386SX-40	$53
ISA 386DX-40 w/64,128k	$90
ISA 486SX25/33 128K	$152/164

VLB/PCI MOTHERBOARDS

486

IBM Alaris 486 SLC2-66 w/m-co	$137
MustangO 486DX-33 256k Intel	$226
MustangO 486DX-40 256K Cyrix	$190
MustangO 486DX2-50 w/256K Intel	$228
MsgO486DX2-66 256K C/AMD/I	$193/227/254
MustangO 486 256k AMD DX2-80	$238
MsgO486DX4-100 Intel/AMD 256K	$361/276

Intel PENTIUM and DX-4

CapricornOC 256k PCI 60/66	$384/469
CapricornE 256K PCI 75/90/100	$535/741/926
CprcrnSM-US 512K PCI/VLB 90/100	$764/949
Intel 256K PCI 60/66 w/ide-io	$479/5
Intel 256k PCI 90/100 w/ide-io	$872/1078
CprcrnAT Triton chip 90/100 256k	$860/1044
Pegasus T PCI/EISA 256k 90/100	$1035/1220
PegsusADI Dual PCI 256K 90/100	$966/1151
PegADE PCI/E Dual 256k 90/100	$1179/1364

ISA/EISA CONTROLLERS

IDE & FAST I/Os

Mustang IDE 2FD-2HD/2FD-2HD	$11/14
Promise DC200 2FD/4HD	$97
FAST-PIG IDE,IO/IO w/16C550 Uarts	$33/27
ULTRA-IO 4S/2P 4 16C550 Bi-Dir Boca	$90

SCSI

Future Domain Comp 16 bit no floppy	$45
ADAP 1522 16BIT Card/Kit	$74/135
ADAP 1542C Card/Kit	$181/247
ADAP 1742 EISA	$352
ADAP 2742 EISA Fast SCSI2 C/K	$291/352
Bus Logic BT 742 Card	$272
Bus Logic BT747S Card/Kit 747S	$287/312
Bus Logic BT 757 Wide S card/kit	$360

VLB/PCI CONTROLLERS

IDE

Mustang IDE-IO VLB Enhanced/PCI	$19/22
Mustang IDE VLB w/Fast IO	$34
Mustang PCI IDE w/16550	$42
MustangP 4030 4HD/2FD Caching	$109

SCSI

NCR(ASUS) SCSI PCI Controller	$72
BusLogic BT445S Fast SCSI-II c/kit	$188/203
BusLogic BT-910A PCI caching	$105
BusLog KT946S SCSI-2 PCI Kit C/K	$247/276
ADAPTEC 2842 SCSI II Kit card/retl	$180/289
Adaptec 2940 PCI Kit card/Retail	$201/289

COMMUNICATIONS

ASA House Brand

902Z 96/24 Fax (Send)/Mod Int	$27
992Z 96/24 Fax/Modem	$39
1414IZ 14.4 F/M,.32/.42 w/Bitfax Int	$48
14.4 F/M .32/.42 w/Voice	$53
28.8 F/M Int(14.4/28.8)	$91
992PZ Pocket 96/24 F/M,.32/.42	$63
1414PZ Pocket 144 F/M, v.32, v.42	$176
992MG PCMCIA 96/24 F/M v. 42	$132
1414MG PCMCIA144/144 F/M v.42	$244

U.S. Robotics

USRobotics 14,4 Mod/Fax I/E	$97/111
USRobotics 28.8 M/F I/E	$220/235

Supra

14.4 F/M Int/Ext	$92/105
28.8 Int./Ext	$189/215

MULTI MEDIA

Panasonic 562 DblSpd 300kb/s	$125
Sony 55E DblSpd	$109
TEAC Quad Panasonic Interface	$177
Mitsumi Quad IDE Interface	$188
NEC 3X 510CDR Int 195ms,450KB/sec	$215
NEC 511 4X Int	$299
TOSHIBA 3501Q Int. 120ms,600Kb/sec	$N.A.
Plextox 6X 900kb/sec,100msec	$548

AUDIO CARDS & MPC KITS

Hyena16+ w/ Spkr, Joystck,mcrphn	$48
Quickshot 16 w/ speakers, card etc	$85
Sound Blaster 16 bulk	$70
Sound Blaster 16 Basic VE Retail	$91
Snd Blaster 16 SCSI/ w/ASP OEM	$110/166
Creative Labs Value CD kit	$259
Encyl 1:Encyl,Animals,World/US Atlas	$31
Educational 1 + Family health	$57
Labtec 150/600 Speakers	$16/25
100 Watt speakers	$48

FIOPPY DRIVES

YE Data 1.2/1.44MB	$41/31
Teac 1.2/1.44MB	$45/34
Teac Dual Floppy 1.2 + 1.44 MB	$88

HARD DRIVES

IDE

CON/QTM 270MB 15msec	$151
CON/Quantum 420MB	$164
WD 425MB 13msec	$NA
CON 540	$183
QTM 540 MV/LTS	$183/208
WD 540 12msec	$209
WD 730/850 12msec	$235/248
Quantum 730LT	$226
CON 850	$257
WD 3100/3200 1.0/1.2 GB	$349/359

SCSI

QUN 540MB MV/LTS	$205/228
Quantum 700 LT	$245
Quantum 1080	$575
Fujitsu 2694ESA 1GB	$539
ST 31230N 1.2GB Hawk	$529
Quantum 2150 GB Atlas	$879
ST 32430N 2.1GB Hawk	$889
ST 32550N 2GB Barracuda	$985
ST 3.4GB ST43400N 3GB	$1509
ST 15150N 4.2GB 8msec Barracuda	$1445
ST 9GB ST410800N	$3135
Micropolis 9GB	$3185

TAPE DRIVES

Colorado 250MB	$149
Conner 420 MB QIC Format	$174
Conner 850 MB QIC Format	$274
Colorado Trakker 250MB	$294
Conner-Python 4320 NT 2.0GB DAT 3.5"	$789
Conner-Python 4324RP 4.0GB DAT 3.5"	$846
HP 2GB 35470 DAT 4mm Int/Ext	$779/869
HP 4-8GB 35480 DAT 4mm Int/Ext	$874/944
HP 4-8GB DAT 1533A 4mm Int/Ext	$990/1100
WANGTEK 3100/3200 2/4GB 4mm Int	$879/985
EXABYTE 4200/4200C 2/4GB	$749/859
EXABYTE 8505xl 12GB 8mm I/Ext	$2055/2265

PRINTERS

OKIDATA

OL 380/321 dotmatrix,24Pin,23K	$217/420
OL400e/410elaser 4ppm, 300dpi	$489/635
OL810, 8ppm, 300dpi	$875
OL830 Plus/850, 8ppm w/ 2MB ps	$1055/1165
OKI ML520/521 9 pin 64K	$359/475
OKI ML590/591 24 pin..auto form	$417/561

HEWLETT PACKARD

Deskjet 540 300dpi,120cps,16k	$289
Deskjet 560C Color,3ppm,300dpi,80k	$465
Deskjet 1200C/ps Color2MB	$1357/1837
HP 4+/4P/4SI/4L/4V	$1349/922/2891/641/1995
4M+/4ML/4MV/4 SiMX	$1941/985/2785/4055

NETWORKING PRODUCTS

NE 2000+ Comp 16bit Coax/10BT	$27/27
NE2000+ Comp Combo soft&hard config	$36
NE 2000 "Run's with Novell"	$29
NE 2000 COMP COMBO AUI+BNC+RJ45	$51
D-Link 16 Bit Soft Config 10BT 1/6 Pk	$70/377
Intel EtherExpress 16 1/5/20pk	$106/480/1752
SMC Ethcard 16 Elite Ult Cx/6 Pk	$109/581
SMCEthcardEliteUltraCOMBO 1/6	$125/625
3C590 PCI Combo	$155
3C509 Eth III Combo 1/5/20pk	$138/531/1909
3Com 579 EISA Coax/10BT	$229/229

Hubs

CeLan 8 Port 10 BT w/BNC Cascade port	$155
CeLan16 Port 10BT w/AUI exp. port	$369
Comp LAN 14Port SNMP capability	$490
Asante 8 Port Hub,8RJ45,1BNC	$247
D-Link 12 Port 10 BaseT	$390
SMC 8 Port Concentrator	$309
SMC 12Port Tiger Hub	$418
3 Com Link Builder 3C621 12 Port	$714

Novell Netware

V3.12/4.01 5/10/25/50	$615/1399/2071/2799
V3.12/4.01 100/250 User	$3919/6999
V4.02 500/1000 User	$1399926879
Windows NT Advance server	$922
Windows NT v 3.1 upgrade	$276

UPS'S

APC-BK 280 ,7 MION,386SX,WS	$99
APC-BK400,10MIN,286,386SX,WS	$155
APC-BK450	$195
APC-BK600,15 min,386/486 FS	$240
APC-BK900/12000,15min,Multi-FS	$367/487
Power doctor/Call UPS	$69/102

SMART UPS (ON-LINE/AUTO BACKUP)

APC 400, 10 min,286,386 FS/WS	$288
APC 600,15 min,386,486 FS/WS	$335
APC 900,15 min CAD/CAM WS/FS	$496
APC 1250,15 min,Multiple FSs	$599
APC 2000,20 min, Mini computers	$1095
Matrix UPS 3000 VA, Multi-server	$2869

CABLES & CONNECTORS

Readymade w/Connectors 10'/25'/50'	$4/6/9
RJ45 10BT patch cabnles 7'/25'	$4/6
SPOOL	$80
RJ45 10BT 1000' level4/5	$119/130
BNC 50 Ohm Terminator/Crimp-ON/Barrel	$1.49
BNC T-Connectors	$1.99

ASA Clearance Items-Cash Only

Syquest 105/44 Ext.	$298/198
Mylex/Hawk EISA Motherboard	$199/175
M.S.Dos V5.0	$19
Lan Adapter Thomas Conrad	$69
Citizen AH39802 Color Kit	$35
Novell DOS	$19
Orchid P9000 VLB 1MB	$199
Orchid Celsius 1/2MB	$139/199
MAXTOR1.2GB51/4PO-125	$480
FUTURUS TEAM E-MAIL	$105

Limited 10days warranty from purchase date

VIDEO ADAPTERS & MONITORS

ISA/EISA ADAPTERS

MGP	$13
VGA 256k	$27
Trident/CL 512K/1MB	$37/61
Tseng ET4000 1MB	$78

VLB/PCI ADAPTERS

MustangVT Trident VLB 1/2MB	$72/117
MustangVC Cirrus log5429 VLB 1/2	$77/121
MustangVS S3-805 VLB 1/2MB	$72/117
MustangET4000 VLB 1MB only	$88
Spider 32 1/2MB,20 WM	$82/127
Spider 32 Plus 1MB	$93
Spider 64 1/2MB VLB/PCI	$114/158
DIAMOND Stealth 64 1/2MB DRAM	$121/167
DIAMOND Stealth 64 1/2MB VRAM	$274/434
ORCHID Celsius/Kelvin 2MB	$221/N.A.
Cirrus Logic 5434 PCI 1/2MB	$93/144
S3-864 PCI 1/2MB	$93/141
ET4000 PCI 1/2MB	$104/154
ATI 32 VLB/PCI 2MB	$227
Matrox PCI MGA Imp 1/4+	$369/$616
Matrox VLB 2+/4mb	$359/479
#9 GXE 64 2MB Dram PCI/VLB	$249
ATI GrapProTurbo 2/4MB PCI/VLB	$277/484
Spider Tarantula Lite (s3-732) 1/2MB	$95/145
Spider Tarantula 2/4 MB	$255/395
Diamond Stealth 64 4MB PCI/VLB	$447

MONO

Mono 14" amber/white	$70
Mono 14"/9" SVGA	$85/120

VGA/SVGA

SVGA 14" 1024 x 768 .39	$190
SVGA 14" 1024 x 768 .28 Int	$202
SVGA 14" 1024 x 768 .28 NI	$217
CTX/kanaka 14" 1024 x 768 .28 Int.	$218
CTX/kANAKA 14" 1024 x 768 .28 NI	$235

CAD 15/17/20"

KFC15".28 1280x1024NI wo/w Dig	$285/345
CTX 15"	$315
Orchestra Tuba 17" 1600x .26	$578-N.A.ETA?
KFC 17" .26 1280x1024 NI w/o digital	$629
KFC 17" .26 1280x w/digital display	$685
Mitac 17" .26 1600x NI Energy*	$689
Viewsonic 6E 14" .28 NI Green	$262
Viewsonic 15E/15 15" 1024x .28	$365/425
Viewsonic 17" 1280x1024	$889
Hitachi-CM2098 20" Elite1280 Anti Glare	$1542
Hitachi-CM 2198 21" .28 1280NI	$1989
Sony-15SF 15" 1280x .25	$425
Sony-GDM17Sf 17"	$899
Sony-GDM20SE 20"	$1895
Mag-DX15F 15"	$359
Mag-DX 17F 17" .26 1280x	($615)/$649

Cases,P/S, K.B, & Mice

ROADRUNNER SERIES

Baby Desk/Mini Tower w/PS	$40/36
Medium Tower w/PS Compact/Regular	$43/53
Full Tower(230W)/Big Tower(300W)	$66/181
Rack Mount W/PS	$331

DIAMOND SERIES (For Black add $5)

Baby Desk/Mini Tower w/PS	$65
Medium Tower Thick w/PS	$93
Full Tower w /PS	$104
File Server w/ 400W PS, 3 Fans 12 F/HDD	$411

External HDD/CD-ROM Cases

1HH w/PS 3.5"/5.25"	$63/58
1FH(2HH)/2FH(3HH)/7HH w/PS	$84/113/206

KEYBOARDS AND MICE

Enhanced/Spill-Resistant 101	$16/18
MaxiSwitch/KeyTronic	$24/26
Small 11.5" 88 Keys/BLACK 101	$33
Russian/Spanish Keyboard	$21/23
Japanese Keyboard, 106 Keys	$59
Microsoft Natural	$95
S-Mouse/TBall	$8/20
LogiTech Ser/Bus bulk	$17/34
Microsoft white box S/B	$29/54
Black Serial	$14

POWER SUPPLIES

PS2 200/230/300W	$30/34/68
PS2 230/250W GREEN PC	$44/52
Full Tower 230/300/400W	$49/63/126
American Enhance 300w PS2/Full	$80

ASAコンピュータ

【日本人のお客様へご挨拶】

◆◆◆募集中◆◆◆

この度ASAコンピューターでは日本においてASAコンピューターを販売してくださる方を募集しています。ご希望の方又は興味のおもちの方は、カメロンまお電話ください。お待ちしています。

☎ (408) 496-6953

FAX (408) 988-0359

MAIN BRANCH

ASA COMPUTERS, INC.

2354 Calle Del Mundo
Santa Clara, CA 95054

National: (800) REAL - PCs
Local: (408) PCs - FOR - U
Fax: (408) 988-0359

Hours: M to F 9AM - 6:00PM
Sat: 11AM - 4PM

INDIANAPOLIS, IN

ADVANCED TECH UNLIMITED

5324 W. 38th Street
Indianapolis, IN 46254
Tel: [317] 291-9211
Int'l: [317] 291-9225
Fax: [317] 291-1482

PLEASANT HILL, CA

STI COMPUTERS

SandalWood Center
609 Gregory LN # 110
Tel: [510] 274-0784
Fax: [510] 946-0180

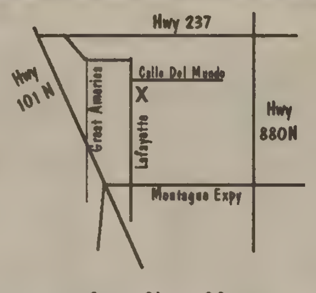
International Sales

Tel: (408) 496-6953
Fax: (408) 988-0359

Internet Address

asa_computers
@ppp.ablecom.net

MAIN BR. LOCATION



Santa Clara, CA

TERMS AND CONDITIONS

COD, FOB Santa Clara, CA. Prices subject to change without notice.

Resellers, Corporations and Schools Volume Discounts available

End-User $7 Extra for orders under $500.
For pick-up orders please allow min of 2 hours for preparation.

All parts are covered by Manufacturer's Warranty; Systems come with system level labor warranty of three years from ASA. Please refer to the ASA Catalog for a full listing of the Terms and Conditions. Not Responsible for Typographical Errors.

ASA COMPONENTS CENTER

DISCOUNT PRICING . SPECIAL CONDITIONS LISTED BELOW TO APPLY

ADDRESS: 2354 CALLE DEL MUNDO, SANTA CLARA, CA 95054

HARD DRIVES	**WESTERN DIG** 540 MB IDE WDAC 540 (Min 10 pcs) $199	**WESTERN DIG** 850 MB IDE WDAC 2850 11 msec $237	**WESTERN DIG** 1.0 GB IDE WDAC 31000 10 msec $334	**WESTERN DIG** 1.2GB IDE WDAC 31200 10 msec $344	**QUANTUM** 270 MB IDE 270 MV (Min 10 pcs) $129
HARD DRIVES	**SEAGATE** 1.2 GB Scsi ST 31230N 9 msec $505	**SEAGATE** 2.4 GB Scsi ST 32430N 9 msec $837	**SEAGATE** 2.5GB Scsi ST 32550N Barracuda-2, 7200 rpm, 8.5 ms $967	**SEAGATE** 4.5 GB Scsi ST 15150N Barracuda-4, 7200 rpm, 8.5 ms $1414	**QUANTUM** 540 MB IDE 540 MV 14 msec $176
HARD DRIVES	**CONNER/QUAN** 420 MB IDE CFS 420/MV 420 (Corp, Schools, & Reseller's Only) $155	**CONNER** 850 MB IDE CFA 850A Fast $239	**CONNER** 1.2GB IDE CFA 1275A (Min 5 Pieces) $344	**CONNER** 1.08 GB Scsi CPA 1080S (Min 5 pieces) $444	**QUANTUM** 730 MB IDE/SCSI LIGHTENING 11 msec $217/239
TAPE/DAT & HARD DRIVES	**TAPE DRIVES** CONNER TAPESTOR 420/850 MB with 1 Cassette $159/267	**DAT DRIVES** CONNER PYTHON CP4320/4324/4326 (2-4)/(4-8)/8-16) GB $791/841/911	**DAT DRIVES** Hewlett Packard 4 mm 2GB/4GB/8GB $791/891/991	**MICROPOLIS** 9.0 GB Scsi MC-1991 12 ms, 5.25" FH, 512k $2246	**QUANTUM** 2.1 GB Scsi Empire 2100S 9 msec $839

CD-ROMs	**SONY** Dbl Speed 55E 300 KB/S (Min 5 pcs) **$104**	**TEAC** Quad Speed 55A 600KB/195MS Interface Card Needed (Min 5 pcs) **$159**	**NEC** Quad Speed CDR-511 600KBs SCSI-2 **$284**	**PLEXTOR** 6X Six Plex 900 KB/S SCSI-2 **$519**	**16 Bit Audio Card** Sound Blaster 16 BASIC - BULK (Min 5 Purchase) **$63**
MONITORs & MODEMs	**14" MONITORs** 3i 14" Interlaced 1024x840 **$179**	**15" MONITORs** 15" .28 Non-Interlaced 1280x1024 **$289**	**17" MONITORs** Orchestra Tuba 17" 1600x1280 .26 Energy Star **$549**	**FAX/MODEM** 14400 w/Voice Int 14400/28800 F/M Int (Min 5 pcs) **$49/87**	**FAX/MODEM** U.S. Robotics 14.4 Int/28.8 Ext **$89/219**
MOTHERBOARDs	**386 motherboard** 386DX-40 Isa w/128k & 4MB of RAM **$219**	**486 Motherboard** VLB/ISA Opti 256k w/Cyrix 4V DX2-80 w/4 MB Ram **$329**	**486 Motherboard** VLB/ISA Opti 256k w/AMD DX4-100 w/4 MB RAM **$369**	**Pent. Motherboard** PCI/ISA 60 Intel 60 Pentium CPU & CPU Fan **$369**	**Pent. Motherboard** PCI/VLB/ISA 90 Intel 90 Pentium CPU & CPU Fan **$709**
NETWORKING & MEMORIEs	**Network Int Cards** NE2000+ Comp. Combo 10BT/Coax (Yes, It Runs Novell) 10 pack **$259**	**HUBs** 8 Port Hub + 1 BNC Lan Prof/Celan (Yes, It Runs Novell) **$99/149**	**HUBs** 16 Port Hub + 1 BNC Lan Prof/Celan (Yes, It Runs Novell) **$189/334**	**Memory** 4x9 bp 3 chip 70 ns (Min 8 Purchase) **$117**	**Memory** 1x32/2x32/4x32 4/8/16 MB - 70 ns (Min 8/4/2 pcs) **$149/291/471**

Nat: 1-800-REAL-PCs; Local: (408) PCs-FOR-U; Fax: (408) 988-0359

COD Prices w/Ad only; FOB Santa Clara, CA; Corporations and Schools for Net Terms upto 4% extra; Prices subject to change without notice.
Resellers Welcome; End-User orders $7 extra for orders under $500; Pick-Up orders please allow Min 2 Hours for Prep
All Parts with Min one year Manufacturer's Warranty; ASA Catalog available upon request.

GREAT MALL COMPUTER

PROUD TO SERVE THE BAY AREA!

MICROSOFT WINDOWS COMPATIBLE

Our Commitment To The Bay Area Is To Bring You:
High Quality Systems
At Competitive Prices
With Outstanding Service!

GREAT MALL COMPUTER
CALL (408) 942-6166

Upgrade Options & Custom Configuration Available

3 Year Warranty
1 Year Parts 3 Years Labor

intel inside
pentium PROCESSOR

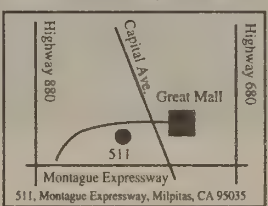
MICROSOFT. WINDOWS NT READY-TO-RUN

energy
EPA POLLUTION PREVENTER

PO'S WELCOME

VISA MasterCard

Centre Pointe Business Park
511 Montague Expressway
Milpitas, CA 95035
TEL: (408) 942-6166
Fax: (408) 942-6160
Email-gmpc@aol.com
Mon-Fri: 8:30-5:30
Sat: 10-4
Price Subject To Change W/O Notice



511, Montague Expressway, Milpitas, CA 95035

PENTIUM PCI SYSTEM

- Intel Pentium Processer w/Cooling Fan
- 16KB Internal, 256KB External Cache
- 8MB 70ns High Speed RAM (128 MBMax)
- 540 MB Fast IDE Hard Drive
- 1.44 MB Floppy Disk Drive
- PCI Enhanced IDE Interface
- PCI Local Bus Accelerator Video Graphics w/1MB RAM
- Built-In 2 Serial/1 Parallel Ports Hi Speed I/O 16550
- 15" Non-Interlaced Flat Screen Color Monitor (1280x1024)
- Mid-Tower/Desk Top Case w/230W PS
- 101 Enhanced Spill Proof Keyboard
- Microsoft Compatible Mouse w/Pad
- 1 Year Parts, 3 Years Labor Warranty

LOWEST PRICE GUARANTEED!

7 Day Risk-Free Period

PENTIUM 75 PCI	$1499
PENTIUM 90 PCI	$1689
PENTIUM 100 PCI	$1859

BUSINESS SYSTEM

- Upgradable To Pentium Over Drive
- Cooling Fan/Heat Sink
- 8KB Internal, 128KB External Cache
- 8 MB 70ns High Speed RAM (64MB Max)
- 420 MB Fast IDE Hard Drive
- 1.44 MB Floppy Disk Drive
- VESA Local Bus Accelerated Video Graphics w/1 MB
- VESA Local Bus 32 Bit IDE Interface
- Built-In 2 Serial/1 Parallel/1 Game Port
- 14" Non-Interlaced SVGA Color Monitor
- Mini-Tower/Desk Top Case w/230W PS
- 101 Enhanced Spill Proof Keyboard
- Microsoft Compatible Mouse w/Pad
- 1 Year Parts, 3 Years Labor Warranty

7 Day Risk-Free Period

486DX4-100 VLB/PCI	$1089/1139
486DX2-66/80 VLB	$999/1029

HOME MULTIMEDIA SYSTEM

- Upgradable To Pentium Over Drive
- 8KB Internal, 128KB External Cache
- 4 MB 70ns High Speed RAM (64MB Max)
- 270 MB IDE Hard Drive
- 1.44 MB Floppy Disk Drive
- VESA Local Bus Accelerated Video Graphics w/1MB
- VESA Local Bus 32 Bit IDE Interface
- Built-In 2 Serial, 1 Parallel, 1 Game Ports
- 14" .28dp Hi-Res NI Color Monitor
- Double Speed CD-ROM Drive
- 16 Bit Stereo Sound Card
- Mini-Tower/Desk Top Case w/230W PS
- 101 Enhanced Spill Proof Keyboard
- Microsoft Compatible Mouse w/Pad
- 1 Year Parts, 3 Years Labor Warranty

With CD-ROM, Speakers & 14 CD Titles!

INCLUDES MS DOS 6.22 AND WINDOWS 3.11

CD TITLES INCLUDE:
Groliers Encyclopedia, Animals, U.S. World Atlas, Etc.

7 Day Risk-Free Period

486DX2-66/80 VLB	$1079/1099
486DX4-100 VLB	$1169

HARD/FLOPPY DRIVES

420 MB/540 MB IDE	$152/168
850 MB/1.0 GB IDE	230/310
1.0 GB/2.0 GB SCSI	445/850
1.44 MB/1.2 MB	27/38

TAPE BACK-UPS

Aiwa 250 MB Int	$95
Conner 420 MB Int	163
Conner 850 MB Int	260
Colorado 250 MB Int/Ext	130/255
Colorado 350 MB Int/Ext	155/315

FAX/MODEMS

Rockwell Chipset	
14400 Int/Ext	$47/69
14400 w/Voice Mail Int	59
28800 V.34 Int/Ext	139/149

VIDEO CARDS

SVGA 512K/1MB ISA	$37/58
SVGA 1 MB VLB/PCI	68/69
Diamond Stealth	
1MB (DRAM) VLB/PCI	120/115
2 MB (DRAM) VLB/PCI	160/156
2 MB (VRAM) VLB/PCI	265/260
4 MB (VRAM) VLB/PCI	400/390

MONITORS

14" SVGA 1024x768 .39	$172
14" SVGA 1024x768 .28 NI	198
15" SVGA 1280x1024 .28 NI	299
MAG	
15" 1280x1024 .28	360
17" 1280x1024 .26	630
IMPRESSION 7 (Mag Oem)	579
SONY	
15SF 1280x1024 .25	439
17SF 1280x1024 .25	859
20SE1 1600x1600 .30	1799
VIEWSONIC	
17E 1280x1024 .28	660
20G 1600x1280 .28	1220

MULTIMEDIA UPGRADE KITS

1) Quad Speed Kit $299
- 4X CD-ROM Drive
- 16 Bit Sound Card
- 15W Stereo Speakers
- Microsoft CD Title Package Includes: Encarta, Works, Money

600 KB Transfer Rate

2) Double Speed Kit $179
- Double Speed CD ROM
- 16 Bit Sound Card
- Stereo Speakers
- CD Package Includes: Groliers Encyclopedia, Animals, U.S. World Atlas, Mavis Beacon, Chessmaster

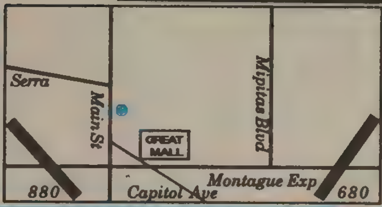
CALL FOR OTHER PARTS & UPGRADES NOT LISTED

ART MULTIMEDIA SYSTEMS, INC

424 S.MAIN STREET., MILPITAS, CA 95035
Tel. (408) 946-7852 * Fax (408) 946-7892
E-Mail: Artcom 7853@AOL.COM

Bus Hrs:
Mon-Fri : 9:30-6:00
Sat-Sun: 11:30-4:00

The Best in Service, Quality, and Price



*Prices & availability subject to change w/o notice
*We accept VISA&Master Card
*Not responsible for typos
*Prices based on cash prices
*Company term on credit approval
*School & Government PO's accepted

DESCRIPTION	MB & CPU
Intel Pentium P5-100/256K PCI	$990
Intel Pentium P5-90/256K PCI	$790
Intel Pentium P5-75/256K PCI	$610
Opti Pentium P5-66/256K PCI+VLB	$412
Opti Pentium P5-60/256K PCI+VLB	$368
Genoa 486DX2-66/256K PCI (Intel)	$299
Genoa 486DX4-100/256K VLB (Intel)	$360
Genoa 486DX4-100/256K VLB (AMD)	$278
Genoa 486DX2-80/256K VLB (AMD)	$246
Genoa 486DX2-66/256K VLB (Intel)	$250
IBM 486SLC2-66/64K VLB w/Mathco	$125
SIS Pentium P5-100/256K PCI w/ide pci	$387
SIS Pentium P5-90/256K PCI w/ide pci	$719
SIS Pentium P5-75/256K PCI w/ide pci	$533
SIS Pentium P5-66/256K PCI w/ide pci	$455
SIS Pentium P5-60/256K PCI w/ide pci	$414
486DX4-100/256K PCI (Intel)	$353
486DX4-100/256K VLB (Intel)	$330
486DX2-66/256K VLB (Intel)	$235
486DX-33/256K VLB (Intel)	$198
486DX4-100/256K PCI (AMD)	$275
486DX4-100/256K VLB (AMD)	$255
486DX2-80/256K VLB (AMD)	$223
486DX2-66/256K VLB (AMD)	$210

MB + CPU SPECIAL

Intel Pentium MB w/ Trident Chipset
+ Intel Pentium CPU
+8MB (EDO) RAM
(MB upgradeable to P5-120MHZ)

P5-100	$1320
P5-90	$1160
P5-75	$967

SPECIAL SAVINGS SYSTEMS

- *Motherboard w/CPU+4MB RAM 70ns
- *1.2 and 1.44MB FDD
- *IDE 2FD/2HD Controller w/ I/O 2S/1P/1G
- *210 MB Hard Drive
- *1024x768 .28DP 14" SVGA Non-Int Monitor
- *512K SVGA Card
- *101 Enhanced Keyboard
- *Enhanced Case w/230 Watt Power Supply
- *Microsoft Compatible Mouse+ Mouse Pad

Intel Pentium P5-100/256K PCI	$1630
Intel Pentium P5-90/256K PCI	$1430
Intel Pentium P5-75/256K PCI	$1250
Opti Pentium P5-66/256K PCI+VLB	$1048
Opti Pentium P5-60/256K PCI+VLB	$1005
Genoa 486DX2-66/256K PCI (Intel)	$936
Genoa 486DX4-100/256K VLB (Intel)	$1006
Genoa 486DX4-100/256K VLB (AMD)	$915
Genoa 486DX2-80/256K VLB (AMD)	$884
Genoa 486DX2-66/256K VLB (Intel)	$878
IBM 486SLC2-66/64K VLB w/Mathco	$762
SIS Pentium P5-100/256K PCI w/pci ide	$1526
SIS Pentium P5-90/256K PCI w/pci ide	$1362
SIS Pentium P5-75/256K PCI w/pci ide	$1173
SIS Pentium P5-66/256K PCI w/pci ide	$1093
SIS Pentium P5-60/256K PCI w/pci ide	$1050
486DX4-100/256K PCI (Intel)	$990
486DX4-100/256K VLB (Intel)	$971
486DX2-66/256K VLB (Intel)	$862
486DX-33/256K VLB (Intel)	$833
486DX4-100/256K PCI (AMD)	$903
486DX4-100/256K VLB (AMD)	$889
486DX2-80/256K VLB (AMD)	$858
[illegible]	$845

UPGRADE OPTIONS

for Special Saving System

[illegible]

Microsoft mouse [illegible] 10

VERY AFFORDABLE 486 VLB

- ◆ 486/256K Motherboard
  Expandable 256K (30&72 pin sockets)
- ◆ 486 CPU
- ◆ 4MB - 70ns RAM Exp. 64MB
- ◆ 1.44 Teac FD (3.5")
- ◆ Spider 32 VLB w/1MB
  - Upgradeable to 2MB
  - Windows Accelerator
  - 16.7 Million Colors
- ◆ IDE VLB w/1p,2s,1g
- ◆ 14" SVGA (1024 x 768, .28dp)
  - non-interlaced, energy saver
- ◆ 420 MB Hard Drive
- ◆ Mini tower Case w/ 230W
- ◆ 101 Enhanced Keyboard
- ◆ Microsoft Compat. Mouse w/ Pad
- ◆ Free CPU Fan

486DX4-100(Intel)	$995
486DX4-100(AMD)	$915
486DX2-80(AMD)	$884
486DX2-66(Intel)	$888
486DX-66 (AMD)	$870

3% OFF

FOR CASH PURCHASE

MULTIMEDIA EXTRAVAGANZA

P5-75 SYSTEMS

SIS P5-75 PCI MB
(Upgradeable to P5-100)
256K Cache
Built on PCI IDE w/ 16550 I/O
P5-75 Intel CPU + Fan
8MB RAM 72 pin
SPiDER 64 PCI w/ 1MB
15" Non-int. Monitor (1280x1024, .28dp)
540MB Hard Drive
1.44 TEAC FD
Super Mini Tower Case w/ 230W PS
101 Enhanced Keyboard
Mouse & Mouse Pad
Impression 4Xi Multimedia Kit:
*TEAC 4Xi CD ROM
*CL Soundblaster 16 MCD
*Speakers
*Microsoft HOME OFFICE CD bundle

$1730

MULTIMEDIA

◆CREATIVE LABS

SoundBlaster Basic 2.0	58
SoundBlaster Pro 16 MCD OEM/MCD w/ASP OEM	84/110
SoundBlaster 16 SCSI-II OEM/SCSI II w/ASP Orig	110/190
SoundBlaster AWE32	265

◆MITSUMI

Double speed CD ROM	120
Quadruple speed CD ROM 4xi	189
◆PANASONIC CD ROM Double Speed w/card	120
◆TOSHIBA CD ROM Quad Speed 3501 Int / Ext	300/405
◆TEAC CD ROM Quadruple Speed	179
◆ Impression 2xi Multimedia Kit: Panasonic double-speed + Soundblaster 16 5 Microsoft *Home* software + Speakers	239
◆ Impression 4xi Multimedia Kit: Teac quadruple-speed + Soundblaster 16 5 Microsoft *Home* software + Speakers	299
◆ Impression SCSI 4xi Multimedia Kit: Toshiba 3501B 4xi + Soundblaster 16 SCSI-II 5 Microsoft *Home* software + Speakers	425

CONTROLLER CARDS

IDE W/I/O / I/O w/ 1p,2s,1g	14/12
IDE VESA Local Bus /w/16550	20/40
Enhanced IDE VLB /w/16550	30/45
PCI IDE/PCI IDE w/16550	36/40
Adaptec SCSI 1522	77
Adaptec SCSI 1542CF/1542CF w/Kit	168/239
Adaptec EISA SCSI 2742T/2742T w/Kit	225/345
Adaptec SCSI PCI 2940 w/Kit OEM/2940W	198/265
Adaptec SCSI 2842A-VL OEM	200

SPECIAL VALUE GENOA 486 VLB

- ◆ 486/256K Genoa Motherboard
  Exp. 512k - (72 pin sockets)
- ◆ 486 CPU
- ◆ 8MB - 70ns RAM
- ◆ 1.44 Teac FD (3.5")
- ◆ Spider 32 VLB w/1MB
  - Upgradeable to 2MB
  - Windows Accelerator
  - 16.7 Million Colors
- ◆ IDE VLB w/ 1p, 2s, 1g
- ◆ 14" SVGA (1024 x 768, .28dp)
  - non-interlaced, energy saver
- ◆ 420 MB Hard Drive
- ◆ Mini tower Case w/ 230W
- ◆ 101 Enhanced Keyboard
- ◆ Microsoft Compatible Mouse w/ Pad
- ◆ Free CPU Fan

486DX4-100 (Intel)	$1160
486DX2-100(AMD)	$1083
486DX2-80 (AMD)	$1046
486DX2-66(Intel)	$1046
486DX-66 (AMD)	$1035

3% OFF

FOR CASH PURCHASE

HARD DRIVES

◆CONNER

420mb/14ms (IDE)	160
1.2GB/12ms (EIDE)	363
850mb/12ms (EIDE)	245
2.1GB/10ms (EIDE)	820

◆MAXTOR

1.2GB/12ms (EIDE)	365
540mb/14ms (IDE)	180
345mb/14ms (SCSI)	173

◆QUANTUM

540mb/14ms (IDE)	183
540mb/11ms LT540AT (IDE)	203
540mb/14ms (SCSI)	213
730mb/12ms (EIDE)	230
730mb/12ms (SCSI)	253
2.1 GB/8ms (SCSI-2)	835

◆WESTERN DIGITAL

420mb/13ms (IDE)	167
540mb/12ms (IDE)	210
1.2 GB/10ms (EIDE)	365

PRINTERS

HP DeskJet 540/560C	298/470
HP DeskJet 1200C/1200C Postscript	999/1570
HP 4P/HP IV	954/1379
HP 4ML/4L	989/512
HP 4MP / 4M Plus	1329/1882

KEYBOARD

101 Enhanced keyboard	$18
Maxiswitch/Keytronics	26/29
Focus 2001/7000/8000/9000	35/47/35/50
Omnikey 101	65

MISCELLANEOUS

◆ZOLTRIX

Fax Modem (96 F, 24 M)/Win	$39
Fax Modem (14400 F, 14400 M) Int / Ext	57/85
Fax Modem 14.4 voice/28,800 Baud	67/113
◆ US Robotics Fax/Modem 14,400	99
◆ US Robotics Fax/Modem 28,800 v.34	220
◆ Microsoft mouse serial/bus	26/53
◆ Logitech Mouseman serial/Bus (4000dpi)	30/51

◆COLORADO

DJ-20 250MB/DJ-35C 350MB DJ-25 700MB	147/173/280
Trakker 250MB/Trakker 680MB	295/350
◆ Baby AT/Mini Tower case w/230W PS	40
◆ Medium Tower case w/230W PS	61
◆ Full Tower case w/250W PS	80
◆ Dual Floppy Drive 1.2+1.4MB	95
◆ TEAC 1.2FD/1.44FD	42/38

BEST BUY PENTIUMS

- ◆ PCI MB w/256K
- ◆ Pentium P5 CPU
- ◆ IDE PCI Controller
  w/1p,2s.1g & 16550 chip
- ◆ 8MB - 70ns RAM (72 pin SIMM)
- ◆ 1.44 Teac FD (3.5")
- ◆ Spider Tarantula Lite w/ 1M
  - Uses the S372 Chipset
  - 64 Bit Accelerator
  - 16.7 Million Colors
  - Expandable to 2MB
- ◆ 14" SVGA (1024 x 768, .28dp)
  - non-interlaced, energy saver
- ◆ 540 MB Hard Drive
- ◆ Medium tower Case w/ 230W
- ◆ 101 Enhanced Keyboard
- ◆ Microsoft Mouse w/ Pad
- ◆ Free CPU Fan

Pentium 100(Intel)	$1840
Pentium 90 (Intel)	$1640
Pentium 75 (Intel)	$1463
Pentium 66 (Opti)	$1290
Pentium 60(Opti)	$1245

3% OFF

FOR CASH PURCHASE

VIDEO CARDS

◆TRIDENT

SVGA-512/1MB (1024x768,16bit)	$38/58

◆DIAMOND

Stealth 24 VLB w/1MB DRAM	125
Viper SE Pro PCI w/2MB	250
Viper Pro Video w/2MB / 4MB	345/475
Stealth 64 VLB/PCI w/1MB/2MB DRAM	130/189
Stealth 64 VLB/PCI w/2MB/4MB VRAM	269/400

◆SPIDER

Tarantula VLB/PCI w/2MB/4MB VRAM	240/355
Tarantual Lite (S3) PCI w/ 1MB/2MB	115/155
32VESA Local Bus w/1MB/2MB	82/130
32VLB Plus w/1MB/2MB	90/135
BlackWidow Engine ISA 1M/2M	125/175
BlackWidow+ PCI/VLB w/1MB/2MB	150/210
256 Cache VLB w/1MB/2MB	97/147
64VLB/PCI w1MB/2MB/4MB	112/160/255

◆ORCHID

Kelvin 64 VLB/PCI w/1MB/2MB DRAM	138/177
Kelvin Easy VLB/PCI w/ 1MB	105
Fahrenheit PRO VLB/PCI 2M/4M VRAM	275/405

◆ATI

ATI Ultra Pro Mach 32 VLB/PCI w/2MB	220
ATI Mach 64 WinTurbo VLB/PCI w/2MB/4MB VRAM	255/400
ATI Expression VLB/PCI w/2MB DRAM	140/175

MONITORS

◆NANAO

F2-15/F2-17/F2-17EX	519/824/915
T2-17/T2-17TS	1234/979
F760iw 21"	1825

◆NEC

XP15/XE15/4FGE	625/525/595
XE17/XP17	955/1185
XE21/XP21	1890/2350

◆MAG

DX15F/DX17F (1280x1024,0.26)	335/610

◆SONY

GDM 20SE/17SF/15SF	1,785/825/415

◆HITACHI

CM1797 (1600X1200,.26)	895
CM-2096 20"	1,165
CM-2198-514 21"	1,635
CM-1586MV	365
ACUVUE GX20/GX21	1460/1765

◆VIEWSONIC

6E/M-V15ES/15/15G	252/325/405/377
17/17G/17E	805/695/670
20/21	1,380/1,599

◆PACOM

Non-interlaced 14" Monitor 0.28	215
Non-interlaced 15" Monitor 0.28	290
Impression 17" Non-int. Monitor 0.28	540

Win 95 Vs. OS/2 Warp

Go For Warp? Wait For Windows? Which Upgrade's For You?

By Lenny Bailes

Microsoft and IBM would like to convince you that Windows 95 or OS/2 Warp, their respective latest and greatest, is the inevitable upgrade choice in your personal computing future.

With a much larger outlay for promotion, and a significantly larger PC user base, Microsoft has convinced many industry pundits and developers that Windows 95 is the logical successor to Windows 3.1 for most Intel 486 and Pentium desktops. Meanwhile, as Microsoft grapples with its much-delayed next-generation release, IBM offers a useful and greatly improved version of OS/2 that's available right now.

As a user of current DOS and Windows 3.1 software (or possibly as a switch-hitting OS/2 user, or even a Macintosh owner), you're probably wondering what the Microsoft/IBM OS war means to you: Should you upgrade to OS/2 Warp (currently available)? Make plans for the advent of Win 95 in six months? Adopt a wait-and-see attitude?

The answer depends on what you want to do with your computer, and your current comfort level with what you've already got. Both Win 95 and OS/2 Warp improve upon Windows 3.1—in the desktop interface, in operating system features, and in potential power under the hood. The short story: most people seem to agree that Win 95 has the "prettier face," but that OS/2 Warp has more muscles.

Here's a longer version of the story:

The Desktop Interface

Both Win 95 and Warp have graphic interfaces that approach the Macintosh desktop as a standard of simplicity. Both systems can display folders, files, printers, programs, and a wastebasket/shredder as freefloating objects on the desktop. (Neither OS has the Mac's slick ability to toggle a hierarchical display of folders and files on and off by flipping a triangle.) Both desktops are more advanced than the Mac on some drag-and-drop features. You can launch programs by dragging files over them, send faxes or print documents by dragging objects over an appropriate icon. You can also save selected portions of documents automatically as desktop objects by dragging and dropping highlighted text or graphics to the desktop. (This last feature is dependent on having specific OLE or OpenDoc features built into individual applications.)

Both Win 95 and OS/2 make full use of the right mouse button to pop up additional dialog boxes and desktop features. Win 95 is prettier on the surface, with a convenient pop-up program launcher called the Task Bar. The Task Bar will look familiar to users acquainted with third-party desktop utilities for either operating system, but Microsoft has done a particularly good job of implementing the idea. Novice users will simply be able to point and click at the programs they want to run without learning how to navigate Program Manager or File Manager. File Manager's tree structure and file management capabilities have been integrated directly into the Win 95 desktop through a feature called the Explorer. You can display file directories, programs, and special objects as icons, or in a tree structure, simply by clicking open a folder and choosing a display view.

OS/2 Warp includes a less elegant system toolbar called the Launch Pad. As with the Win 95 Task Bar, you may drag and drop programs, folders, and desktop objects into Warp's LaunchPad to open them with a single mouseclick. But LaunchPad lacks the Task Bar's collapsible, bird's-eye view of all the applications on your system.

If you really like Win 95's Task Bar concept, you can actually find a similar OS/2 utility in Lotus Development's SmartCenter, currently bundled with Lotus SmartSuite. (Check out the figure floating around this column and see if you can figure out which came first: the chicken or the egg.)

Warp OS/2 does not have Win 95's ease of use with respect to directory and file management. This is, in part, because the OS/2 strategy is to phase out access to your hard drive at the file/directory level.

The Warp "Drives object" is essentially unchanged from the version in OS/2 2.1. It allows you to click open and display files, directories, and drives as icons or in a detailed text-based list. You can select and move/copy files, but IBM doesn't expect you to do this very often; hence the lack of convenient toolbars and menu features for bulk file manipulation. The OS/2 Warp desktop is designed to be a smart desktop.

Columbus was wrong. The world isn't round, it's digital.

Don't just take our word for it. Come to L.A. June 5-7 and see for yourself. *Upside Magazine* says about the Digital World Conference "four out of five industry experts surveyed said this conference was the best. The rest probably haven't gone." This year, the traditional conference program includes Digital Demo Day, the Multimedia Legal Symposium, and Wiring America: Broadband Networking Strategies.

What's more, at the Digital World 95 Expo you'll find top exhibitors, showing off the latest products and services in digital media, art and communications. You can also join in on the Creative Cafe panels, presented by the Writers Guild of America, West, the Interactive Media Festival Gallery, Interactive Cable World, and more.

JUNE 5-7, 1995
LOS ANGELES CONVENTION CENTER

FOR MORE INFORMATION
CALL 800-488-2883

SAVE $50!

Register me FREE for the expo & send me conference information

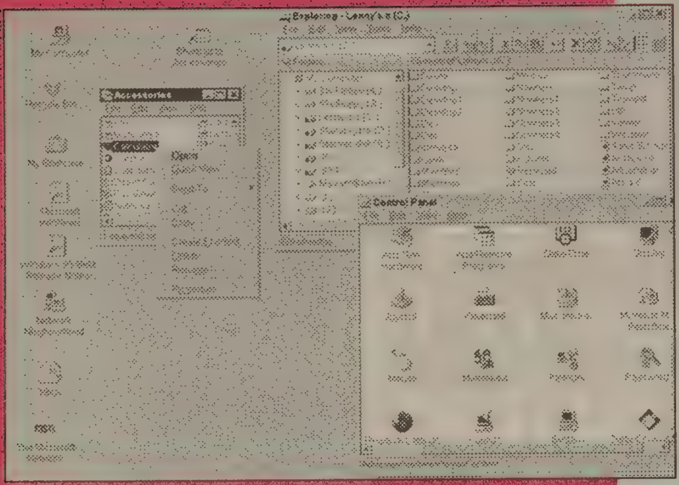
Name______________________________
D170
Company______________________________
Address______________________________
City, State, Zip______________________________
Phone/Fax______________________________

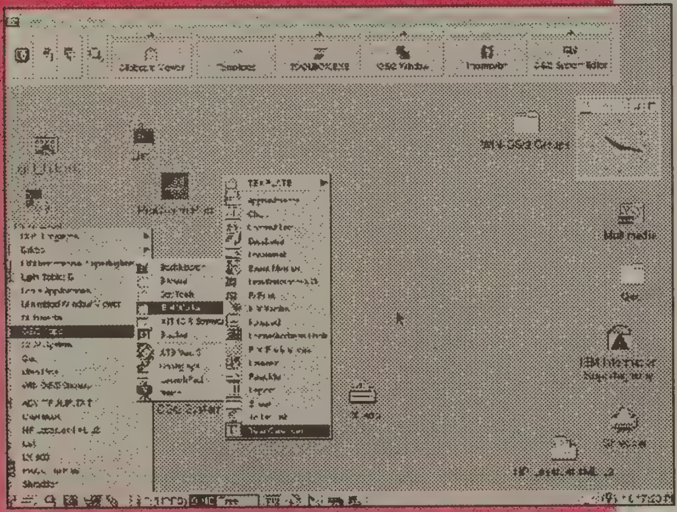
Send to: DW 95, P.O. Box 5856, San Mateo, CA 94402-0856. Or Fax to 415-525-0199.

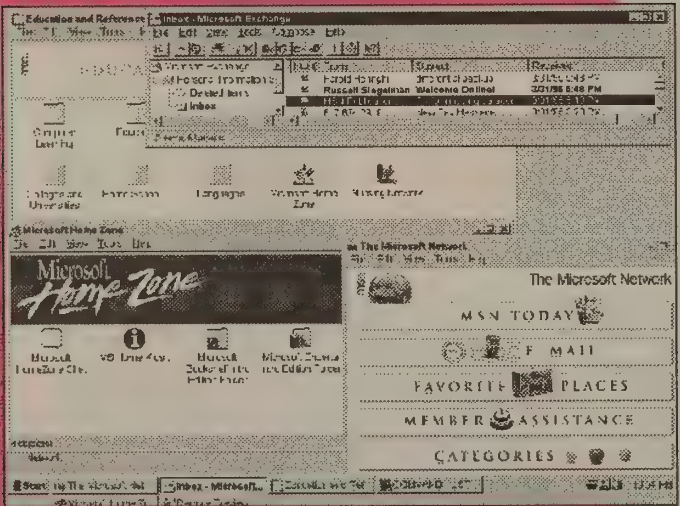
Access the Internet at http://www.sbexpos.com. © 1995 SOFTBANK Expos. No one under 16 admitted.

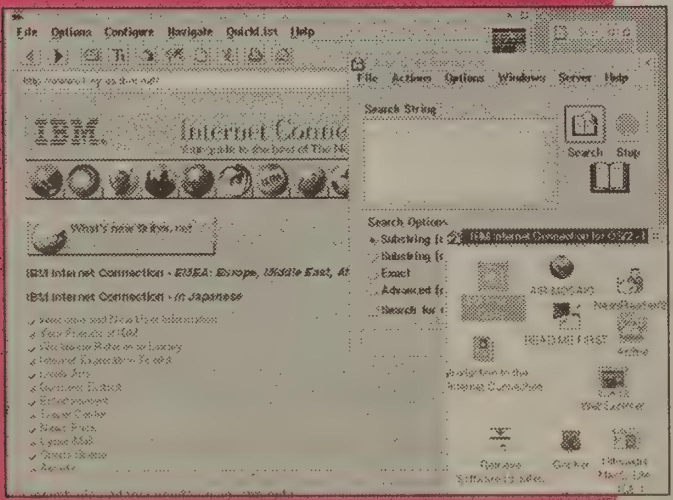
YEAR SIX
Digital World
CONFERENCE & EXPOSITION

Win 95 Vs. OS/2 Warp *continued...*









Top to Bottom:

Fig. 1. The Win95 Interface "borrows" the best features of OS/2, offering multiple pathways to launch programs and manipulate files.

Fig. 2. The Warp OS/2 Desktop, showing IBM's LaunchPad at the top of the screen and Lotus SmartCenter's expanding menus (which bear an amazing resemblence to the Windows 95 Taskbar)

Fig. 3. The Microsoft Network will feature access to newsgroups, local forums, and and online versions of Microsoft's Bookshelf and Encarta multimedia reference tools.

Fig. 4. Warp's WebExplorer is a multithreaded browsing tool that can scroll through the contents of a Web Page while graphic elements are still being downloaded. The Archie utility is a new OS/2 Internet tool which can be downloaded from IBM's FTP File Server.

Instead of manipulating files and directories, Warp makes it easier to create and manipulate Shadow objects on the desktop. These Shadows are really married to the datafiles, programs, and directories they represent—much more so than in Win 95.

Win 95 "Shortcuts" are also desktop pointers to real files, but their associations can be easily broken. In Win 95, if you rename a directory or transfer a spreadsheet from one directory to another, the "shortcut" that points to the file becomes worthless.

In OS/2, a desktop Shadow remains linked to its file no matter what you do to it. If you rename the file, the Shadow is renamed, and vice versa. Under Warp, instead of placing a folder on your desktop which is a directory full of files, you're encouraged to make Shadow objects of the files you'll really be using—applications, spreadsheets, text documents, etc.

Warp's global search features and preconfigured templates make it easy to do this. When you drag a special program, folder, or document template to the desktop, it will automatically prompt you to associate an appropriate filetype.

To be fair, Win 95 also has a convenient template feature. If you right-click the Win 95 desktop and select "New," you can immediately create document objects for six or seven registered filetypes, including most MS Office applications. But Win 95 offers far fewer registered templates than OS/2 Warp. (You can kludge around with Win 95's System Registry to add new filetypes to the menu, but there's no explicit user feature for this.) Also keep in mind that if you intend to do much file and directory manipulation in OS/2, you'll want to obtain a third-party file management utility. (Several shareware and commercial programs are available to take care of this chore.)

Under The Hood—What Does 32-Bit Support Mean?

Both Win 95 and OS/2 Warp are 32-bit operating systems. What this really means can be confusing: Various software and hardware processes under both operating systems involve mixed 16-bit and 32-bit execution. Generally, a 32-bit operating system processes code that directly addresses a special 32-bit instruction set built into the computer's CPU. Theoretically, this results in brisker application performance.

More important with Win 95 and OS/2 Warp are the abilities to support preemptive multitasking and multithreading. These features allow the operating system and the 32-bit applications to cooperate intelligently in allocating system resources.

I've tested several 32-bit Windows applications that are "single-threaded," and haven't been able to notice any difference between them and the ordinary 16-bit versions of the same programs.

Multithreaded programs are another story: if an application is trying to print and accept keyboard input while another program downloads a file (or recalculates a spreadsheet), the operating system's ability to coordinate these processes simultaneously definitely makes a difference.

Right now, there aren't any multithreaded 32-bit applications for Windows 95, except for its built-in demo of the Microsoft Network. Eventually, if Win 95 is as successful as people think it will be, vendors will issue multithreaded, 32-bit updates of current 16-bit Windows programs. But as it stands, since Win 95 doesn't preemptively manage older 16-bit Windows 3.1 (or DOS applications), it does no real preemptive multitasking. Multitasking with your current programs under Win 95 is still simulated, using the CPU timeslice technique that Quarterdeck Office Systems invented for DESQview, in 1985.

OS/2 Warp, on the other hand, fully controls and threads all application processes, including MS-DOS and Windows sessions. While each Windows or DOS session under OS/2 is a single-threaded process, these sessions are coordinated in the background with multithreaded native OS/2 applications. So, according to its design architecture, OS/2 Warp has a superior multitasking engine.

Theory And Practice

On paper, OS/2 Warp is a superior multitasker to Win 95, but in reality, your mileage may vary.

There are some scenarios in which OS/2 Warp is demonstrably more efficient. For instance, if you play back a video or run a multimedia game while formatting a floppy diskette, Win 95 transforms itself into a shuddering slug. Warp performs both tasks without missing a beat of music or a single display frame.

On the other hand, Windows disk and graphic performance tests, when run under Win-OS2, produce scores that are anywhere from 15 to 40% worse than under Windows 3.1 or Win 95. Windows 3.1 and Win 95 perform equally well on these same tests (and better than Warp). Windows for Workgroups v3.11 typically outperforms any of the other OS variants.

Conclusion: OS/2 Warp requires more hardware power than Windows 3.1 or Windows 95 to offset its inherently slower disk and video handling. If you're running your applications one at a time, an 8MB Windows 3.1 system or a 16MB Win 95 system both deliver more sprightly performance than a 16MB OS/2 Warp system. The Windows systems will open and close folders, save files, refresh the screen, and bring up applications noticeably faster than the Warp system.

For people with limited hardware resources, an upgrade to Windows for Workgroups is cheaper, and may produce better performance than either Win 95 or OS/2 Warp.

As you start adding background tasks and increasing the workload on your machine, the slow-and-steady tortoise starts to look better than the flashy, fashionable hare. OS/2 Warp can perform many processor-intensive tasks simultaneously without significant deterioration of its less robust baseline.

Memory Protection—Crash-Proof Applications?

In theory, both Win 95 and OS/2 run native 32-bit applications in a protected memory space. If something goes wrong with the program, the operating system is supposed to allow you to exit gracefully, without crashing other programs or the desktop.

In reality, either operating system can be totalled by a program that fouls up the shared video display or certain shared memory resources. Recently Microsoft has taken a lot of heat in the press from programmers who assert that even 32-bit Win 95 applications will corrupt the entire system by sharing certain memory addresses and functions with real-mode DOS and 16-bit Windows applications.

While this objection to Win 95 has some truth in it, things should be kept in perspective: It is almost certainly true that 32-bit Win 95 applications, when they arrive, will be more protected and isolated from each other than current Windows and DOS apps. Microsoft has also built additional tricks into Win 95 to safeguard the performance of 16-bit apps: The USER and GDI portions of the operating system are designed to permit only one application at a time to access certain critical functions.

Overall, memory protection has been improved in Win 95: a general protection fault in a single application is less likely to take the entire system down with it. But the improvement is not what Microsoft claims it to be: a true isolation of 32-bit applications in separate virtual machines. The lordly 32-bit Office Suite dandies will occasionally have to walk through the low-rent district where 16-bit CorelDRAW gangsters hold court.

Again, OS/2 Warp has a steadier underlying architecture, with its built-in capacity to isolate 16-bit DOS and Windows programs in separate sessions.

My experience has been that running Windows 3.1 programs under OS/2 in separate sessions affords more protection than running them in Windows 3.1 or Win 95. But Warp's ability to run separate Windows sessions is not without its cost. Each session consumes a memory overhead of 1.5 to 2MB of RAM in addition to whatever memory is required by the application. This consumptive use of available RAM is the part of the psychology that convinced Microsoft not to implement the "separate virtual sessions" feature in Win 95.

Moral: Whatever amount of RAM you felt was comfortable for running Windows 3.1 should be multiplied by a factor of 1.5 or 2 for Win 95, or by a factor of 2 to 2.5 for OS/2 Warp. Forget about claims by either company that you'll only need 4MB to 8MB on your system.

RESOURCES:

Windows 95 (Currently still in beta testing)
Contact Microsoft at (206)882-8080 for information on the public Preview Program.

OS/2 Warp, v3 and OS/2 Warp Fullpack, v3
(The Fullpack version includes a complete copy of Microsoft Windows in the box; the standard version requires a separate copy of Windows 3.1 or Windows for Workgroups from Microsoft in order to run Windows applications)
IBM Corporation
1-800-992-4777

Bundled Productivity Features

Both Win 95 and OS2 Warp contain productivity applets and system maintenance tools not present in MS-DOS, Windows for Workgroups/Windows 3.1, or previous versions of OS/2.

In the area of productivity applications, OS/2 Warp's Bonus Pak offers an unprecedented deal, including spreadsheet, word processor, and database programs that are adequate for light business use. These full-featured applications can import and save data in a wide number of popular formats, including Lotus 1-2-3, WordPerfect, Word, Ami Pro, Excel, dBASE IV, and others. Win 95 has no such productivity power, but offers extensive networking support with bundled email management.

Both operating systems include basic multimedia support, basic telecommunication programs, built-in fax support, and more sophisticated recovery and maintenance tools than in previous versions.

Win 95 has a slight edge in the System Utility department, including a new, improved version of the DriveSpace disk compression program, and a backup utility that supports most generic QIC40/QIC80 tape drives.

In short, the two competing operating systems complement each other in bundled utilities, with Warp being the winner in terms of productivity features, and Win 95 in connectivity and network support.

In addition to integrated support for Microsoft NETBEUI, IPX/NetBIOS, and TCP/IP networking, Win 95's Direct Cable Connection and Dial-Up Networking modules permit users to connect to remote machines through a serial/parallel link or by dialing into a network through a modem.

In terms of Internet support, OS/2 Warp is

continued on page 254

PACKAGE 1 SYSTEM

486 VLB Series

☑ Motherboard w/ CPU (256K Cache)
☑ 4Mb Ram installed
☑ IDE Controller VLB 2HD & 2FD w/ 2s, 1p, 1g
☑ Floppy Drive 1.44Mb
☑ Hard Disk 540Mb IDE 12ms
☑ Window Accelerator VLB w/1Mb
☑ 14" Super VGA Color Monitor (1024x768) .28 NI
☑ 101 Keys Enhanced Keyboard
☑ Mini Tower Case w/ 230 Watts Power Supply
☑ 3 Button Serial Mouse

AMD 486DX2-66	**$938**
AMD 486DX2-80	**$948**
AMD 486DX4-100	**$968**
Intel 486DX2-66	**$948**
Intel 486DX4-100	**$1,058**

PACKAGE 2 SYSTEM

486 VLB Series

☑ SIS-471 Motherboard w/ CPU (256K Cache)
☑ 4Mb Ram installed (72-pin)
☑ EIDE Controller VLB 2HD & 2FD w/ 2s, 1p, 1g
☑ Floppy Drive 1.44Mb
☑ Hard Disk 540Mb IDE 12ms
☑ **Spider+ Window Accelerator VLB w/1Mb**
☑ **14" Acer 34T SVGA Color Monitor (1024x768) .28 NI**
☑ 101 Keys Enhanced Keyboard
☑ Mini Tower Case w/ 230 Watts Power Supply
☑ **Logictec 2 Buttons Serial Mouse**

AMD 486DX2-66	**$978**
AMD 486DX2-80	**$988**
AMD 486DX4-100	**$1,008**
Intel 486DX2-66	**$988**
Intel 486DX4-100	**$1,098**

PACKAGE 3 SYSTEM

486 VLB / PCI Series

ASUS®

☑ Asus Motherboard w/ CPU (256Kb Cache)
☑ 4Mb RAM Installed (72-pin)
☑ IDE PCI Controller VLB 2HD & 2FD w/ 2s, 1p, 1g
☑ Floppy Drive 1.44Mb
☑ Hard Disk 540Mb IDE 12ms
☑ **Spider Tarantula Lite PCI w/ 1Mb**
☑ **15" Acer 56L SVGA Color Monitor (1024x768) .28 NI**
☑ 101 Keys Enhanced Keyboard
☑ Mini Tower Case w/ 230 Watt Power Supply
☑ **Microsoft Ergonomic Serial Mouse**

AMD 486DX2-66	**$1,118**
AMD 486DX2-80	**$1,128**
AMD 486DX4-100	**$1,158**
Intel 486DX2-66	**$1,138**
Intel 486DX4-100	**$1,288**

PACKAGE 4 SYSTEM

Asus Pentium PCI Series

ASUS®
pentium
PROCESSOR

☑ **Asus Triton Motherboard w/ CPU (256Kb Cache)**
☑ 8Mb RAM Installed (72-pin)
☑ EIDE Controller PCI 2HD & 2FD w/ 2s, 1p, 1g
☑ Floppy Drive 1.44Mb
☑ Hard Disk 540Mb IDE 12ms
☑ **Diamond Stealth 64 DRAM PCI w/ 1Mb**
☑ **15" Acer56L SVGA Color Monitor (1024x768) .28 NI**
☑ **Keytronic 101 Keys Enhanced Keyboard**
☑ **Super Mini Tower Case w/ 230 Watt Power Supply**
☑ **Microsoft Ergonomic Serial Mouse**

Intel P5-75MHz	**$1,678**
Intel P5-90MHz	**$1,868**
Intel P5-100MHz	**$2,048**

PACKAGE 5 SYSTEM

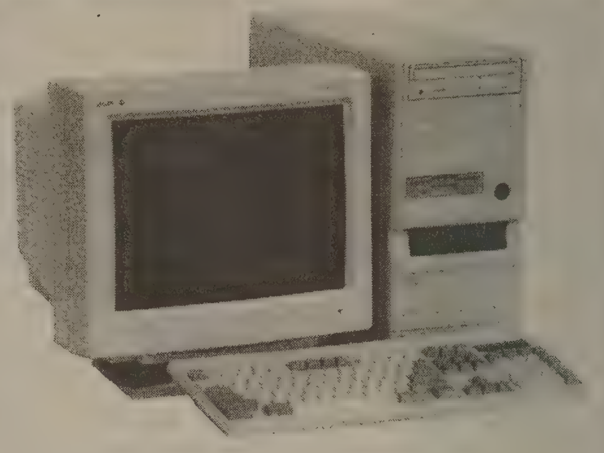
Intel Pentium PCI Series

intel®
pentium
PROCESSOR

☑ **Intel Motherboard w/ CPU & Heatsink (256Kb Cache)**
☑ 8Mb RAM Installed (72-pin)
☑ EIDE Controller PCI 2HD & 2FD w/ 2s, 1p, 1g
☑ Floppy Drive 1.44Mb
☑ Hard Disk 540Mb IDE 12ms
☑ **Diamond Stealth 32 PCI w/ 1Mb**
☑ **15" Acer 56L SVGA Color Monitor (1024x768) .28 NI**
☑ **Keytronic 101 Keys Enhanced Keyboard**
☑ **Super Mini Tower Case w/ 230 Watt Power Supply**
☑ **Microsoft Ergonomic Serial Mouse**

Intel P5-90MHz	**$1,848**
Intel P5-100MHz	**$2,028**

486 MULTIMEDIA SYSTEM



✱ SIS-471 MOTHERBOARD W/ CPU (ZIF SOCKET)
✱ 256K CACHE (EXPANDABLE TO 512KB CACHE)
✱ **8MB RAM INSTALLED (72-PIN)**
✱ IDE CONTROLLER VLB 2HD & 2FD W/ 2S, 1P, 1G
✱ FLOPPY DRIVE 1.44MB
✱ **HARD DISK 540MB IDE 12MS**
✱ **SPIDER+ 32 VLB WINDOWS ACCELERATOR W/ 1MB**
✱ **15" ACER 56L SVGA MONITOR (1024x768) .28 NI**
✱ 101 KEYS ENHANCED KEYBOARD
✱ MINI TOWER CASE W/ 230 WATTS P.S
✱ **MICROSOFT ERGONOMIC SERIAL MOUSE**
✱ **TEAC 55A QUAD SPEED CD-ROM DRIVE**
✱ **SOUND BLASTER 16-BIT SOUND CARD**

AMD 486DX2-66	$1,488
Intel 486DX2-66	$1,498
AMD 486DX4-100	$1,528
Intel 486DX4-100	$1,618

YOUR BEST VALUE IN THE BAY AREA

One Year Warranty Parts and Labor
Systems Burned In and Tested For 72 Hours
Custom Configurations Available
Financing Available

STORE HOURS:
Mon.-Fri. 9:30 AM to 7:00 PM
Saturday 10:00 AM to 6:00 PM

PIXEL U.S.A.

1937-B Tully Rd., San Jose, CA 95122
(408) 929-7218 FAX: (408) 929-7244

VISA MasterCard

SAVE 3%
ON CASH PURCHASES

Price, term, availability subject to change without notice. Not responsible for typos. Cash discount applies to currency only (not checks and credit cards). Please call for more information.

MOTHERBOARDS W/O CPU

GENERIC

486 VLB w/ 256Kb (30 & 72-pin) ZIF	$89
486 PCI&VLB w/ 256Kb (30 & 72-pin) + IDE I/O	$148
SIS P5-75/90/100Mhz w/ 256Kb	$168

Acer

VLB SIS-471 486 w/ 256Kb (AMI BIOS, 5V)	$95
VLB SIS-471 486 w/ 256Kb (AMI BIOS, 5V & 3V)	$118

FREE COMPUTER TECH.

VLB SIS-471 486 w/ 256Kb (30&72-pin, 5V)	$108
VLB SIS-471 486 w/ 256Kb (30&72-pin, 5V & 3V)	$118
VLB SIS-471 486 w/ 256Kb (72-pin, 5V)	$108
VLB SIS-471 486 w/ 256Kb (72-pin, 5V & 3V)	$118
PCI SIS P5-75/90/100 w/ 256Kb	$198

AIR

Advanced Integration Research, Inc

SH-2 256Kb VLB 486	$118

IBM

VLB 486BL-75MHz w/ 256Kb + CPU + 387	$228

American Megatrends

Atlas PCI 256Kb P5-90 w/ CPU	$1,148
Titan II 256Kb P5-90mHz (w/ 1 CPU)	$1,598

intel.

Integrated 2 serial (16550), 1 parallel (EPP)
2 floppy & enhanced IDE ports

P5-90MHz w/ 256Kb	$298
P5-100MHz w/ 256Kb	$318

ASUS

Integrated 2 serial (16550), 1 parallel (EPP)
2 floppy & enhanced IDE

486 VLB & PC w/256Kb (SIS PVI-486SP3)	$158
P5-75/90/100MHz w/ 256Kb (SIS PCI/I-P54SP4)	$258
P5-90/100MHz w/ 256Kb (Triton PCI-P54TP4)	$298
P5-90/100MHz w/ 256Kb (Triton Burst Sram)	$368
P5-75/90/100MHz w/ 256Kb (Dual P5 P54NP4D)	$398

CPU'S

Advanced Micro Devices

AMD 486DX2-66MHz (3V)	$ Call
AMD 486DX2-66MHz (5V)	$ Call
AMD 486DX2-80MHz (3V)	$ Call
AMD 486DX4-100MHz (3V)	$ Call

intel.

Intel 486DX-33MHz	$ Call
Intel 486DX2-66MHz	$ Call
Intel 486DX4-100MHz	$ Call

pentium PROCESSOR

Intel P5-75MHz (3V)	$ Call
Intel P5-90MHz New Version (3V)	$ Call
Intel P5-100Mhz (3V)	$ Call

MEMORY

1 x 9 - 70ns (3 chips or 9 chips)	$ Call
4 x 9 - 70ns (3 chips)	$ Call
4 x 9 - 70ns (9 chips)	$ Call
1 x 32 - 70ns (72-pin) 4Mb	$ Call
1 x 36 - 70ns (72-pin) 4Mb	$ Call
2 x 32 - 70ns (72-pin) 8Mb	$ Call
2 x 36 - 70ns (72-pin) 8Mb	$ Call
4 x 32 - 70ns (72-pin) 16Mb	$ Call
4 x 36 - 70ns (72-pin) 16Mb	$ Call
8 x 36 - 70ns (72-pin) 32Mb	$ Call

VIDEO CARDS

ISA, VLB & PCI BUS

Super VGA w/ 512Kb	$34
Windows Accelerator w/ 1Mb (CL-5422)	$58
Windows Accelerator VLB w/ 1Mb (Trident-9400)	$68
Windows Accelerator PCI w/ 1Mb (Trident-9440)	$78
Windows Accelerator PCI w/ 1Mb (S3-864)	$88
Windows Accelerator VLB w/ 2Mb (ET-32i)	$98
Acer P60 PCI w/ 1Mb (Trio 764)	$98
AcerGraph L50 (CL-5430 + IDE I/O)	$118

Genoa

SYSTEMS CORPORATION

8500 VLB Turbo w/ 1Mb	$85
Phantom 32P PCI w/ 2Mb	$148

DIAMOND

Computer Systems, Inc

SpeedStar Pro VLB w/ 1Mb (CL-5428)	$95
SpeedStar Pro 64 PCI w/ 1Mb (CL-5434)	$118
Stealth 32 PCI or VLB w/ 1Mb (Tseng W32P)	$98
Stealth SE VLB or PCI w/ 1Mb (Trio S3-732)	$98
Stealth 64 VLB or PCI w/ 1Mb (S3-764)	$128
Stealth 64 VRAM VLB w/ 2Mb exp 4Mb (S3-964)	$258
Stealth 64 Video VRAM VLB w/ 2Mb (S3-968)	$288
Stealth 64 Video VRAM PCI w/ 2Mb (S3-968)	$288
MultiMedia Kit (4000)	$298
MultiMedia Kit (5000)	$438
MultiMedia Kit (6000)	$388
Other	$Call

ORCHID

Kevin EZ VLB w/ 1Mb	$88
Celsius VLB w/ 1Mb (AGX015) VRAM	$95
Celsius VLB w/ 2Mb (AGX015) VRAM	$148
Kelvin 64 VLB / PCI w/ 1Mb	$128

SPiDER

Graphics, Inc.

32+ VLB w/ 1Mb (CL-5428)	$95
256 Cache VLB w/ 1Mb (C&T)	$95
Tarantula Lite PCI w/ 1Mb (S3-732)	$98
64 DRAM VLB or PCI w/ 1Mb (CL-5434)	$118
Tarantula 64 VRAM VLB or PCI w/ 2Mb (S3-964)	$238
Other	$Call

ATI

TECHNOLOGIES INC

Perfecting the PC

Graphic XPression VLB / PCI 2Mb (OEM)	$188
Graphic XPression PCI 2Mb (Retail)	$208
Graphic Win Turbo VLB / PCI w/ 2Mb Vram (OEM)	$268
Graphic Win Turbo PCI w/ 4Mb Vram (OEM)	$458

Hercules

Dynamite Stinggray VLB w/ 1Mb	$98
Dynamite Power PCI w/ 2Mb DRAM	$188
Dynamite Graphic Power PCI w/ 2Mb VRAM	$258

matrox

MGA Impression + PCI-2+ w/ 2Mb exp. 4Mb	$298
MGA Impression + MGA-IMP+ w/ 2Mb (Retail)	$348

Number Nine

Computer Corporation

9GXE64 VLB / PCI w/ 1Mb (S3-864)	$178
9GXE64 VLB / PCI w/ 2Mb (S3-864)	$228
9GXE64 PRO PCI w/ 2Mb (S3-964)	$348
Other	$Call

MONITORS

14" (1024 x 768) .28 Non-interlaced	$208
15" (1280 x 1024) .28 Non-interlaced	$278

Acer

14" ACER 34T (1024 x 768) .28 NI	$228
15" ACER 56L (1024 x 768) .28 NI 76Hz Refresh	$348
17" ACER 76I (1280 x 1024) .28 NI	$618

MAG INNOVISION

15" Mag DX 15F (1280 x 1024) .28 NI	$348
17" Mag DX 17F (1280 x 1024) .26 NI	$618

ViewSonic®

17" ViewSonic 17G	$718
20" ViewSonic 20G	$1,288
21" ViewSonic 21PS	$1,638

ADI

15" ADI 4G (1280 x 1024) .28 NI (Low Radiation)	$368
17" ADI 5A (1280 x 1024) .26 NI (Low Radiation)	$668

SONY.

15" 15SF (1280 x 1024) .25 Non-Interlaced	$438
17" GDM - 17SF	$848
17" GDM - 17SE1	$998
20" GDM - 20SE	$1,798

NEC

15" NEC 15XV / 15XE	$448 / $548
17" NEC 17XV / 17XE	$788 / $988
21" NEC 21XE	$1,948

INTERFACE CARDS

Parallel Card	$9.95
IDE ISA 2HD, 2FD, 2s, 1p, 1g	$9.95
IDE VLB 2HD, 2FD, 2s, 1p, 1g	$16
AT I/O 2s (16,450 UARTS), 1p, 1g	$12
AT I/O 2s (16,550 UARTS), 1p, 1g	$25
Tyan 1346 IDE VLB 4HD, 2FD, 2s, 1p, 1g (16,550)	$23
Tyan 1342 IDE VLB 4HD, 4FD, 2s, 1p, 1g (16,550)	$38
Tyan 1366 IDE PCI 2HD, 2FD, 2s, 1p, 1g (16,550)	$45

DATA TECHNOLOGY CORPORATION

2278D IDE VLB 4HD & 2FD 2s, 1p, 1g	$23.95
2130 IDE PCI only	$25

adaptec

Total Connect 1505 w/ kit (Retail Box)	$48
Total Connect 1515 w/ kit (Retail Box)	$88
Total Connect 2825 w/ kit (Retail Box)	$148
1542CF w/o Kit (OEM)	$178
1542CF w/ Kit (Retail Box)	$248
2940 PCI SCSI-2 w/ kit (OEM)	$188
2940W PCI Fast SCSI w/ kit (OEM)	$238
2842 VL Fast SCSI-II VESA w/ Kit (Retail Box)	$228

BusLogic

BT-946C PCI SCSI-2 (OEM)	$198

HARD DISKS

WESTERN DIGITAL

730Mb EIDE 10ms (WD-2700)	$238
850Mb EIDE 10ms (WD-2850)	$258
1.281Mb EIDE 10ms (WD-31200)	$358

Maxtor®

540MB IDE 12ms (MXT-7540AV)	$188
540MB IDE 12ms (MXT-7546A) w/ 256Kb	$228
1.2GB EIDE 12ms (MXT-71260A) w/ 256Kb	$368

CONNER

540MB EIDE 12ms (CFA540A)	$178
850MB EIDE 12ms (CFA850A)	$248
1.2GB EIDE 12ms (CFA1275A)	$358
1.08GB SCSI-2 (CFP-1080s)	$468
2.14GB SCSI-2 8.5ms (CFP-2107s)	$998
4.0GB SCSI-2 (CFP-4207S)	$1,298

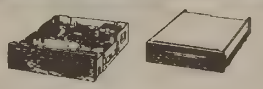
Quantum®

540MB IDE 12ms	$178
540Mb SCSI 12ms (LPS540S)	$225
XP32150S 2.1GB SCSI-2 8.5ms	$898

Seagate

1.0GB Fast SCSI-2 9ms (ST31200N)	$525
2.0GB Fast SCSI-2 0ms (ST32430N)	$895
9.0GB Fast SCSI-2 11.5ms (ST410800N)	$3,185

FLOPPY DRIVES

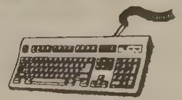


1.44Mb / 1.2Mb (Panasonic)	$30 / $38
1.44Mb (TEAC)	$33
1.2Mb (TEAC)	$42
1.44Mb (TEAC) Black	$38
1.2Mb (TEAC) Black	$48
1.2MB & 1.44MB Combo (TEAC)	$88

CD-ROM DRIVE

Panasonic 2X (CR-562)	$113
Acer 2X (IDE)	$108
Sony 55E 2X (IDE)	$113
Mitsumi 4X (IDE)	$178
Teac 55A 4X	$178
Toshiba 3601B 4X SCSI-2	$308
Other	$Call

KEYBOARDS



Mitsumi 101 Enhanced Keys	$15
Keytronic 101 Enhanced Keys	$25
NMB 101 Enhanced Keys Click	$45
Focus 2001 101 Enhanced Keys	$32
Focus P9000 Click w/ Calculator	$48
Microsoft Natural	$88

CASE & POWER SUPPLY

Mini tower + 230 watts P.S	$33
Desk Top Case + 230 watts P.S	$43
Super Mini Tower + 230 watts P.S	$48
Mid tower Case + 230 watts P.S	$58
Full Tower Case + 250 watts P.S	$78
Super File Tower Case + 300 watts P.S (2 Fans)	$158
Acer full tower case w/ 250 watts P.S.	$125
Black Color (Towers)	$Call

MODEMS

MAXTECH

Modem & Fax 14.4 (internal)	$58
Modem & Fax 14.4 w/ Voice (internal)	$68
Modem & Fax 28.8 (Internal)	$108

USRobotics®

The Intelligent Choice in Data Communications

Sporter Modem & Fax 14,4 (Internal)	$98
Sporter Modem & Fax 14.4 (External)	$118
Sporter Modem & Fax 28.8 V.34 (Internal)	$228
Sporter Modem & Fax 28.8 V.34 (External)	$248

MICE

3-Buttons Serial	$6.95

LOGITECH

2 Buttons Serial (OEM)	$14.95
Dexxa Serial OEM / Retail	$14.95 / $17.95
MouseMan Serial OEM / Retail	$24.95 / $29.95
MouseMan Bus (OEM)	$45.95
Portable Serial (OEM)	$34 95
First Serial (Retail)	$25 95
First TrackBall Serial (Retail)	$44.95
TrackMan Combo Serial (Retail)	$74 95
TrackMan Voyager Serial (Retail)	$64 95
CyberMan 3D Controller (Retail)	$55.95
WingMan Joystick	$29.95
WingMan Joystick Extreme	$49 95

Microsoft®

Microsoft Serial Mouse (Ergonomic)	$24.95
Microsoft PS-2 Mouse (Ergonomic)	$45.95
Microsoft Bus Mouse (Ergonomic)	$59.95

ACCESSORIES

Colorado

Tape Backup Solutions

Colorado 250Mb Tape Back-up (Retail Box)	$149.95
Colorado 350Mb Tape Back-up (Retail Box)	$169.95
HP-51640 Series (Magenta, Cyan, Yellow, Black)	$24.95
CPU Cooling kit w/ heatsink & fan	$4.98
CPU Cooling Kit w/ heatsink & fan (All Pentium)	$7.98
Speaker 4W	$6
Speaker 25W	$28
Speaker 80W	$45
MS-DOS 6.22 w/ System only	$45
Windows 3.11 w/ System only	$55
Windows 3.11 for WorkGroup w/ System only	$65

YAMAHA

Yamaha 3W (YST-M5)	$48
Yamaha 10W (YST-M10)	$78
Yamaha 25W (YST-MSW10)	$158
Yamaha 25W (YST-SS510)	$198
Yamaha 25W (YST-SS1010)	$228

CREATIVE

CREATIVE LABS, INC.

Sound Blaster Pro Value Edition (Retail)	$73
Sound Blaster 16 Basic (OEM)	$78
Sound Blaster 16 MCD (Retail)	$123
Sound Blaster 16 MCD w/ ASP (Retail)	$163
Sound Blaster 16 SCSI-II (OEM)	$118
Sound Blaster 16 SCSI-II w/ ASP (Retail)	$193
Sound Blaster AWE 32 Value Edition (Retail)	$228
Sound Blaster AWE 32 (Retail)	$268
Discovery 16 CD (Retail Package)	$238
Multimedia Home Office 4X (Retail Package)	$428

PIXEL U.S.A.

SAVE 3%
ON CASH PURCHASES

VISA

1937-B Tully Rd., San Jose, CA 95122
(408) 929-7218 FAX: (408) 929-7244

MasterCard

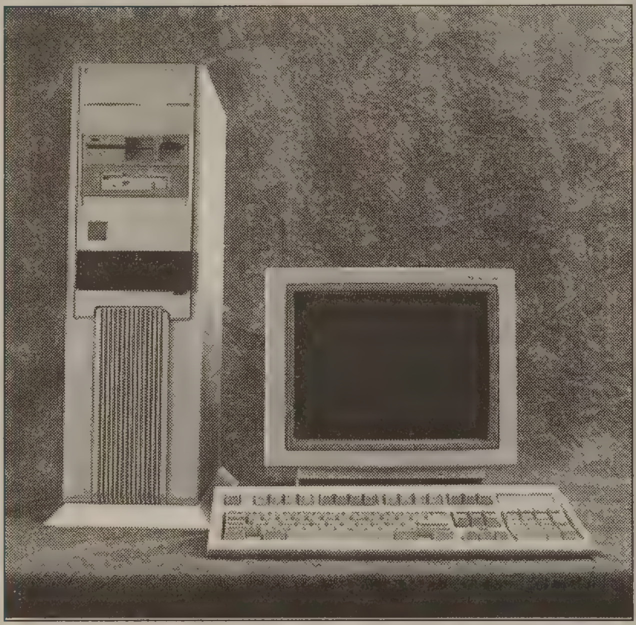
Price, term, availability subject to change without notice. Not responsible for typos. Cash discount applies to currency only (not checks and credit cards). Please call for more information.

MERCURY CENTER
More Information
ONLINE

ENTER 1ACC or by
FAX 494-4949 * 1ACC

ACCESS
COMPUTER TECHNOLOGIES

Now OPEN In Rohnert Park!



90MHz Pentium PCI/VLB

- Pentium PCI Motherboard
- 0MB RAM expandable to 128MB
- Intel Pentium 90MHz processor
- 256K Cache memory
- 3.5" 1.44MB Floppy Drive
- 4 PCI, 2 VLB, 3 ISA slots
- CPU Cooling Fan
- Mini tower case w/ power supply
- 101-key enhanced keyboard
- 1 year parts and labor warranty

$899

100MHz.................................$1059

GREEN 486DX2-66 VLB

- Green 486DX motherboard
- 256K Cache memory
- 0MB RAM expandable to 64MB
- AMD DX2-66 processor
- 3.5", 1.44MB floppy drive
- 3 VLB expansion slots
- 2 serial, 1 parallel and 1 game port
- VLB IDE HD/FD Controller
- Mini tower case
- 101-key enhanced keyboard
- 1 year parts and labor warranty

$388

GREEN 486DX4-100 VLB

- Green 486 VLB motherboard
- 256K memory
- 0MB RAM expandable to 128MB
- Intel DX4-100 processor
- 3.5" 1.44MB floppy drive
- 3 VLB expansion slots
- 2 serial, 1 parallel & 1 game port
- VLB IDE HD/FD controller
- CPU Cooling Fan
- Mini tower case w/ power supply
- 101-key enhanced keyboard
- 1 year parts and labor warranty

$488

STORE HOURS
Mon - Fri: 9 - 8
Sat - Sun: 10 - 5
(Pacific Time)

(408) 247-4444
(408) 247-4448 FAX

SANTA CLARA
2225 El Camino Real
Santa Clara, CA 95050

ROHNERT PARK
@ Immecor Building
100 Professional Ctr. Dr.
Rohnert Park, CA 94928
Tel:707-585-3036 Fax: 707-585-6938

AC Power Conditioner 300VA... $29^00 ACC300

NANAO

FlexScan™ Monitors

EPA POLLUTION PREVENTER

MPR II

REDUCED ELECTROMAGNETIC FIELDS TCO 1992 AUTOMATIC DISPLAY POWER DOWN

F2•15	15"	.28	1280x1024 @66Hz refresh	$499
F2•17	17"	.28	1280x1024 @66Hz refresh	$789
F2•17EX	17"	.26	1600x1200 @66Hz refresh	$919
T2•17TS	17"	.25	1600x1200 @66Hz refresh	$999

EPSON

486DX2-66 MHz w/ 170MB HD

- AMD 486DX2-66 MHz
- 4MB exp to 64MB
- 3.5" 1.44MB floppy drive
- 170MB hard drive
- Built-in VGA upgradeable to 1MB
- Mouse & keyboard included
- MS DOS, Win not included

NextStep 3.1
SSN001 $49

IAE266A **$599**

HEWLETT PACKARD

INKJET

DeskJet 540	279.00
DeskJet 560C Color	449.00
DeskJet 1200C Color 2MB 600dpi	999.00
OfficeJet 3-in-1 Fax, Printer, Copier	749.00

LASER

LaserJet 4L 300dpi, 4ppm, 1MB	499.00
LaserJet 4+ 600dpi, 12ppm, 2MB	1349.00
LaserJet 4M+ 600dpi, 12ppm, 6MB	1859.00
LaserJet 4MV Postscript	2699.00

COMPAQ

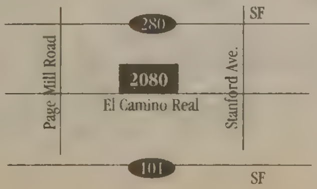
ProLinea™ 4/66

- 486DX2-66 MHz
- 4MB RAM exp to 100
- 540MB hard drive
- 3.5" 1.44MB floppy drive
- Energy Star Complaint
- Local Bus Graphics
- 1MB Video Memory
- Pre-installed MS DOS 6.0, MS Windows 3.1 and Toolworks

$1099

(415) 813-0600
(415) 813-0635 FAX

PALO ALTO
2080 El Camino Real
Palo Alto, CA 94036



MERCURY CENTER
More Information
ONLINE

ENTER 1ACC or by
FAX 494-4949 * 1ACC

ACCESS

ACCESS
COMPUTER TECHNOLOGIES

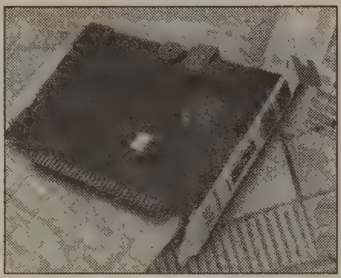
- Price good thru 5/29/95
- Not responsible for typos
- Price subject to change without notice
- Sale prices are for end users purchase only

MERCURY CENTER
More Information
ONLINE
ENTER 1ACC or by
FAX 494-4949 * 1ACC

1 ACCESS COMPUTER TECHNOLOGIES

Sales & Service Open 7 Days!

USRobotics
The Intelligent Choice in Data Communications

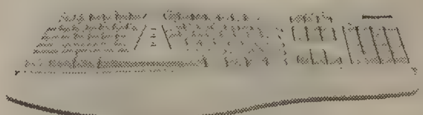


Sportster Fax Modems

14.4 Internal	$ 84.99
14.4 External	109.00
14.4 PCMCIA Fax Modem	139.00
28.8K V.34 Internal	209.00
28.8K V.34 External	229.00
28.8K V.34 Mac	299.00

Microsoft®

Natural Keyboards



Best Price!

$79.99

Northgate

OmniKey Ultra T Keyboard

Great Price!

$99.99

Network Solutions

Cardware
Ethernet Adapter
Combo
NIC9406 $39.99

efa
Ethernet Adapter
Combo
NIE100 $39.99

3Com
Etherlink IV TP/ 5pack
NIE509T $469*

*sold in packs of 5

Hard Drives

Quantum

525MB, SCSI, 12ms, LPS5255	$189.00

Maxtor

420MB, 12ms, 7420AV	165.00
540MB, 12ms, 7540AV	179.00

CONNER

425MB, 13ms, CFS425A	159.00
540MB, 12ms, CFS540A	174.00
850MB, 12ms, CFA850A	237.00
1.27GB, 12ms, CFA1275A	359.00
1.0GB, 10ms, SCSI, CFP1080S	469.00

WESTERN DIGITAL

540MB, 11ms, AC2540	189.00
850MB, 10ms, AC2850	259.00
1GB, 10ms, AC3100	369.00

(408) 247-4444
(408) 247-4448 FAX

SANTA CLARA
2225 El Camino Real
Santa Clara, CA 95050

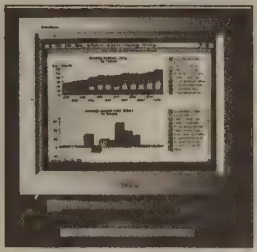
ROHNERT PARK
@ Immecor Building
100 Professional Ctr. Dr.
Rohnert Park, CA 94928
Tel:707-585-3036 Fax: 707-585-6938

Complete Graphic Solutions!

SONY

CPD-1425

14" Trinitron Color Computer Monitor



- .25mm dot pitch
- 1024x768 resolution
- 60Hz refresh rate
- 3 year limited warranty

energy EPA POLLUTION PREVENTER

New! **$319**

15sf	15", 1280x1024	$ 429.00
17sf	17", 1280x1024	869.00
17se	17", 1600x1280	995.00
20se	20", 1600x1200	1799.00

Panasonic

Office Automation OA

PanaSync C1491

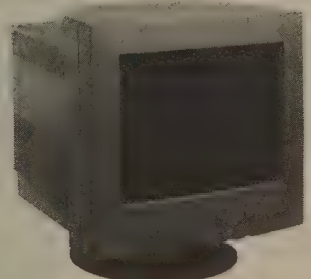
14" SVGA Monitor

energy EPA POLLUTION PREVENTER

- 1024x768
- 0.28mm dot pitch
- Auto-multi mode scanning
- Non-interlaced

$229

NEC MultiSync Monitors



OptiClear SURFACE

REDUCED MAGNETIC FIELD RMF

THREE YEAR LIMITED 3 LIMITED WARRANTY

energy EPA POLLUTION PREVENTER

XV Series Value

- .28 dot pitch
- Up to 1280x1024 resolution
- 60-70Hz refresh rates

XV14	14"	$ 319
XV15	15"	395
XV17	17"	699

XE Series Enterprise

- .28 dot pitch
- 60-70Hz refresh rate
- 3 year warranty

XE15	15"	$ 499
XE17	17"	949
XE21	21"	1995

XP Series Professional

- .28 dot pitch
- Up to 1600x1200 resolution
- Access Bus technology

XP15	15"	$ 669
XP17	17"	1169
XP21	21"	2498

(415) 813-0600
(415) 813-0635 FAX

PALO ALTO
2080 El Camino Real
Palo Alto, CA 94036

280
SF
Page Mill Road
2080
El Camino Real
Stanford Ave.
101
SF

MERCURY CENTER
More Information
ONLINE
ENTER 1ACC or by
FAX 494-4949 * 1ACC

ACCESS

ACCESS COMPUTER TECHNOLOGIES

- Price good thru 5/29/95
- Not responsible for typos
- Price subject to change without notice
- Sale prices are for end users purchase only

MERCURY CENTER
More Information
ONLINE

ENTER 1ACC or by
FAX 494-4949 * 1ACC

ACCESS
COMPUTER TECHNOLOGIES

Authorized Sales & Service Center

EPSON

Stylus Color Ink Jet

Best Selling Color Printer!

- TRUE 720x720 dpi resolution
- 240cps at 12cpi
- 5 bitmap, 4 scalable fonts
- Windows and Mac compatible
- 100 sheets paper tray
- 2 year warranty

Come in and see the difference!

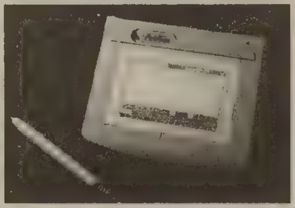
BEST OF BYTE COMDEX Spring '94

PTE720 **$519**

Post Mouse

Pen-Based Computing...

Easy & Affordable!



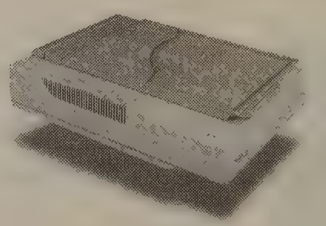
The Mouse Solution...
just sign it & fax it back!"

- 3" x 4.5" Active area
- Up to 4064 lpi enhanced
- 2-button stylus pen
- SDraw software

New!

New Generation Mouse! **$77**

RELISYS



Reli2412
Single-Pass
Color Scanner

- Dust-free razor sharp scans
- No warm up time
- Up to 35,000 hour lamp lie
- 24-bit color flat bed
- 1200x300 dpi optical hardware resolution
- 16.8 million color recognition
- Kai Power Tool, Photoshop LE & OmniPage
- Cold Scan Technology
- 2400x2400 max resolution

NEW! **$599**

(408) 247-4444
(408) 247-4448 FAX

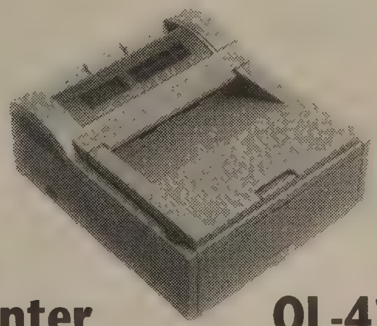
SANTA CLARA
2225 El Camino Real
Santa Clara, CA 95050

ROHNERT PARK
@ Immecor Building
100 Professional Ctr. Dr.
Rohnert Park, CA 94928
Tel:707-585-3036 Fax: 707-585-6938

Largest Printer Selection!

OKIDATA® ... Laser Quality!

The Best Value in Personal Printers!



Mac & PC compatible

OL-400e LED Page Printer

- 300 dpi resolution
- 512K RAM
- 4 PPM printing speed
- 5 year printhead warranty

PC MAGAZINE EDITOR'S CHOICE 11/23/93

Best Selling Printer!

$379

OL-410e PS Postscript

- 600 dpi class output
- Fast 4 PPM printing speed
- Postscript for Mac or PC
- 5 year printhead warranty

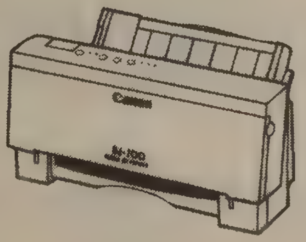
$729

OL410e 600dpi class..........................$529

Canon

Bubble Jet Printers

BJ-100D



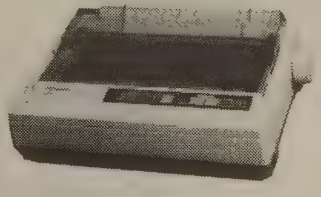
- 360dpi resolution
- 140cps @ 10cpi
- 100-sheet paper tray
- 90 day warranty

PTC100D **$129***

**2nd inventory printer*

BJC-600e Color 720x360dpi	479.00
BJ-200ex 240cps, 720x360dpi	229.00

Panasonic Office Automation OA



KX-P2123
24-pin Quiet Printer

- 240cps printing speed
- 10 built-in fonts
- 2 year warranty

Great Buy!

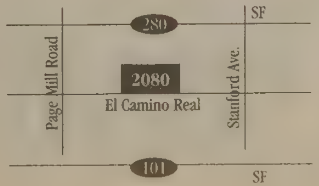
PTP2123D **$139***

Color Option **$49**

**2nd inventory printer w/ full warranty*

(415) 813-0600
(415) 813-0635 FAX

PALO ALTO
2080 El Camino Real
Palo Alto, CA 94036



MERCURY CENTER
More Information
ONLINE

ENTER 1ACC or by
FAX 494-4949 * 1ACC

ACCESS

ACCESS
COMPUTER TECHNOLOGIES

- Price good thru 5/29/95
- Not responsible for typos
- Price subject to change without notice
- Sale prices are for end users purchase only

MERCURY CENTER
More Information
ONLINE

ENTER 1ACC or by
FAX 494-4949 * 1ACC

1 ACCESS
COMPUTER TECHNOLOGIES

Complete Mobile Solution!

NEC

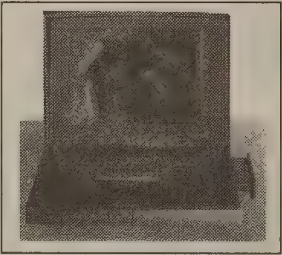
Versa® S Color Sub-Notebook

Best Selling Notebook!

- SL-486SX-33MHz processor
- 4MB RAM exp to 12MB
- DSTN Passive Color Screen
- 210MB Hard Drive
- SurePoint Pointing Device
- Weighs less than 5 lbs.
- 3 year warranty

New Lower Price!

NBN33D **$1399**



EVEREX
EVER for EXcellence℠

StepNote Color Module Notebooks

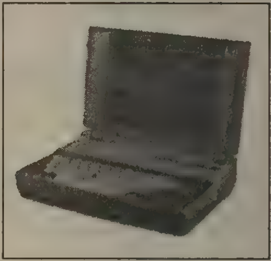
- Intel 486DX4-100 processor
- 4MB RAM exp to 20MB
- 540MB Hard Drive
- DSTN Passive Color Screen
- Built-in 1MB VGA
- Multimedia Ready w/ Microphone & speaker
- Removeable hard drive, screen, floppy drive
- DOS, Win & Mouse included

intel inside

NBV100PY **$2399**

TOSHIBA

T4900CT



Pentium Color Notebooks

- Pentium™ 75MHz processor
- 8MB RAM exp to 40MB
- 810MB Hard drive
- Active Color display
- 16-bit sound capability
- 3 year warranty

New!

NBT4900C **$5388**

(408) 247-4444
(408) 247-4448 FAX

SANTA CLARA
2225 El Camino Real
Santa Clara, CA 95050

ROHNERT PARK
@ Immecor Building
100 Professional Ctr. Dr.
Rohnert Park, CA 94928
Tel:707-585-3036 Fax: 707-585-6938

Complete Multimedia Solution!

MITSUMI

Quad Speed IDE CD-ROM Drive

Best Buy

- 600MB CD capacity
- 230ms access time
- Caddyless

HDM4000 **$169**

NEC and CREATIVE

CREATIVE LABS, INC.

Multimedia Kit

- NEC Quad Speed CD Rom Drive
- Creative Labs SoundBlaster 16 SCSI Sound Card
- Labtec Stereo Speakers
- Microsoft Encarta 95
- Plus 30 more software titles

HDN511K **$388**

Teac

Quad Speed

- 195ms access time
- 600KB/sec transfer rate
- Sound Blaster compatible

HDT55A **$169**

SONY

Dual Speed

- 250ms access time
- IDE internal drive
- 256KB cache buffer

HDS55EI **$109**

2Vi Kit

w/ MS Encarta

- 2x speed
- IDE interface included

HDN250 **$159**

2V Deluxe

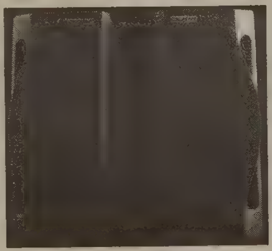
w/ 3 CD Titles

- 2x speed
- Encarta, Myst, SimCity

HDN250DX **$259**

CREATIVE

CREATIVE LABS, INC.



SoundBlaster Speakers SBS3000

- Designed and manufactured by Yamaha
- 10 watts per channel
- Magnetic shielding
- AD adapter included

New!

$59.95

SB16 Value Edition ADS115	$ 82.95
SB16 MCD ADS114	119.00
SB16 MCD ASP ADS114A	149.00

CREATIVE

CREATIVE LABS, INC.

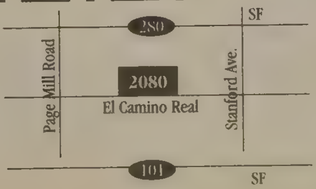
Discovery CD New Edition

- SoundBlaster 16 Stereo Sound Card
- Creative Labs 2X CD ROM drive
- Stereo speakers
- 18 software titles

ADS124 **$229**

(415) 813-0600
(415) 813-0635 FAX

PALO ALTO
2080 El Camino Real
Palo Alto, CA 94036



MERCURY CENTER
More Information ONLINE
ENTER 1ACC or by FAX 494-4949 * 1ACC

ACCESS
ACCESS
COMPUTER TECHNOLOGIES

- Price good thru 5/29/95
- Not responsible for typos
- Price subject to change without notice
- Sale prices are for end users purchase only

Foresight

The Lessons Of Borland,

(And Hindsight)

The Promise Of New Ventures

From Philippe Kahn

By Dennis Erokan and Mary Eisenhart
Photos: Tustin Ellison

The last time we went down to Scotts Valley to do a big interview with Philippe Kahn, Borland had just embarked on what was to be a spectacular roller-coaster ride. It had recently acquired the Paradox database software, and Kahn was gleefully demoing Quattro, the spreadsheet that was supposed to give Lotus 1-2-3 some serious competition. Still in the future was Borland's startling acquisition of Ashton-Tate, essentially in order to have dBASE.

The wild ride took its toll on both Borland and Kahn, who was even then one of the few surviving founder-CEOs in the business. The company was battered not only by corporate culture clash from the merger and ferocious competition in the database software market, but by a long-running look-and-feel lawsuit by Lotus, claiming that the 1-2-3 compatible menus in Quattro infringed Lotus's copyrights. As a Massachusetts court decided the case in favor of Lotus and levied a multimillion-dollar judgment against Borland, Kahn was beset on another side by shareholder lawsuits and attempts to oust him, citing such issues as the Lotus suit and Kahn's predilection for making (at his own expense) Borland promotional holiday CDs featuring himself jamming with stellar jazz musicians.

These days Kahn, who resigned as CEO and president late last year but remains as chairman, seems much recuperated from a traumatic '94. A leaner Borland is focusing successfully on

the developer-tools market—Quattro having been sold to Novell, and the database business having become commoditized—and he's excited about his new startup, Starfish Software, currently residing in a vacated Borland building and rapidly developing its own corporate culture with a mix of ex-Borland and outside people. ("Starfish—you know, you cut off one of its legs, and it grows back," says one person. "The Starfish Enterprise!" quips another.)

Founded last year by Kahn and artist/interface designer Sonia Lee, Starfish already has two sucessful products. The ever-popular Sidekick organizer and a productivity enhancer known as Dashboard were acquired from Borland, and the company is working on a host of Windows 95 products to ship when Microsoft finally releases the OS.

Meanwhile, things are looking up on the Borland side. An appeals court recently overturned Lotus's victory against Borland, at least temporarily removing the threat of the huge judgment against them.

And, greatly to Kahn's amusement, he's been approached by Sony jazz maven George Butler about a commercial release of those much-maligned promotional CDs.

"Borland's getting a little more stable now, and with this place taking off, it'll be easier," says Kahn, clearly tempted. "But as you know, music is a commitment. The guy wants to do it, but then he wants to *tour*, and I don't have time for a tour. Unless we couple it with a user group tour..."

Φ

At what point in Borland's history did Starfish come into existence?

Starfish was started in January 1994 by Sonia Lee and myself. Sonia is a graphic artist and user interface designer who started focusing on building better software to manage people's lives.

She figured a lot of people had expended a lot of time focusing on managing businesses with software; Intuit had spent some time in managing personal finances. But very few people had focused on managing people's lives and helping people be more productive—for professionals who have kids, there's a whole bunch of balls that you have to juggle all the time, and no one was focusing on that.

She started Starfish to do that; sketched out a whole bunch of products and started building a few. I helped her out—didn't have too much time, because Borland was taking a lot of my time. But over time we started hiring developers and designing the software that you'll see in the Windows 95 time frame.

The focus was "Slimware," building simple products with very visual user interfaces and a new approach to dealing with all of this organizational communications type of thing.

Starfish started evolving, and then Borland took the turn of focusing on development and development tools. There were these two great products, Dashboard and Sidekick, at Borland, and Borland was looking for a home for them. Several companies were interested—they had a lot of potential because they're very good brand names and also good technology. Starfish made an offer that was more appealing than the other ones.

Dashboard is a productivity booster for Windows—it's something that makes Windows easier and more efficient. It's reviewed consistently as a great thing, and just won Editor's Choice at *PC Mag.* We're working on a version for Windows 95; we think that'll be an opportunity.

At first people say, "Windows 95 will bring world peace and solve world hunger," but the bottom line is that new operating systems mean new opportunities because they never do everything. Just like the Macintosh has lots of utilities and different things.

Instead of taking Sidekick into the realm of "We're going to build the best corporate-workgroup product," like Lotus Notes or something, we're looking at making it the best personal communicator. We believe that where you keep your address book, where you manage your time, is where you want to do these things from. If I want to send something to Dennis, I look you up in Sidekick and I want to blast a note to you; I don't want to change programs. The natural place to do that is in Sidekick.

We do a little of that today in Sidekick 2.0, but we'll do a lot of that in the Windows 95 version, which will be available when Windows 95 ships. The future of Sidekick is as your helper, your personal communicator.

This is a personal question, because I [Dennis] was the last known user of the Macintosh version of Sidekick—did you feel as connected to the Mac version as you did to the Windows/PC version?

We like the Macintosh Sidekick, but the Windows is the one where we've put a lot of attention.

But that's very interesting. As recently as a week ago, I started looking at every contact manager/organizer on the Macintosh, and they're so weak compared to what we do in Sidekick 2.0, that we were starting to say, "Maybe we should do something in there!" [*laughs*]

All these products have some interesting aspects to them, a lot of them actually borrowed from work we had done over the years, because as you know we kind of invented the category back in '84 with the first Sidekick. But nobody's done a great job on the Macintosh, which might be an opportunity. I'm not announcing that we're going to do something, but it's interesting to see that there's an open market.

We sure hope the Mac will be successful, but what we're seeing there is that a lot of the better software is done by people who see a bigger commercial opportunity on the Windows side. Because if you're a software developer, it's hard to develop software for a platform that doesn't have the volume, so the challenge for Apple is to get the volume up.

You were one of the first large companies to see that, back when you closed down your Macintosh side. Is it still just not enough critical mass for you?

What we see is that it's about 10% of the marketplace. That could shrink when Windows 95 comes out. We don't want that to shrink; it's good that there's a competitive market. But the challenge to Apple is to do what it takes to get a lot of Macs out there, whether it's clones or licensing the operating system. Something's got to happen.

If that were the case, it would make a big difference. But one of the key ingredients to getting good software is to have great tools, and one of the reasons Windows has an advantage is that today the development tools are better on Windows than they are on Macintosh. I think Apple has not paid enough attention to the tools market.

There are no tools such as [Borland's] Delphi in the Macintosh market. Developing a modern application today is a very complex challenge, because the level of software is such that a single person, or two or three guys in a garage, have a hard time doing that level. It's not just the design and the development process; it's the quality assurance, the testing. Forget the distribution challenges, we'll talk about that in a second. But the act of developing an application is extremely complex, and that has to do with the tools.

"The strategy was not to be bigger and stronger; the strategy should have been 'Let's be focused and do what we do best.'"

Lee, cofounder of Starfish

Traditionally on the Mac or even on the PC you have to do it in C++, or in C, and that's a very complex process. The other category of tools that's been available has been more interpretive tools—you can build your Visual Basic application under Windows, or your HyperCard application on the Mac. But everybody knows that a HyperCard app or a Visual Basic app are toys. You can distribute it; it's good for a little medical application you write on the side. But it's never going to be the next spreadsheet or the next word processor.

The result is that it's very difficult for small companies to emerge in key markets.

About three years ago Borland went on the idea that a new kind of tools had to emerge, one that gave you the ease of design and conceptualizing what you wanted to do that you'd get from a visual development environment, and on the other side, the performance of a state-of-the-art optimizing compiler, which is what C++ does—it crunches your code into something real small and fast that can execute very rapidly. It allows you to do a number-crunching spreadsheet or a word processor that performs reasonably. But on the other hand, you need those rocket-scientist guys to build the software.

Bringing both together is something that people said couldn't be done. Bringing those two together was kind of a technology challenge that was met, and the reviews of the product are great.

A lot of people look at Delphi as a product that's great for client-server corporate applications, and it is. But what I think is much more important—the importance of Delphi in the next ten years, and tools like it, is that it will bring back the vision of having three guys in a garage being able to build the next killer app. Bring back creativity, if you want, to the software development process.

It seemed that in the last five years, the small company didn't have a chance any more; it had to be the Microsofts, Borlands, and Lotuses of this world that had to build the software. That's one of the things that Delphi can do.

I have the theory that the notion Wall Street and a lot of financial types have, that software is going to consolidate just like the car industry, is wrong. Yes, there's going to be consolidation. Maybe there's going to be more megamergers. But will there be small software companies, or software companies that can grow? We absolutely believe so, because unlike the car industry or the airplane industry, you don't need a factory, a plant, to do that. The only thing you need is what we have here at Starfish—we have thirty-five people, out of which twenty-seven or so are doing software development, and the rest are doing marketing and sales.

The incredible opportunity for distribution, we believe, is twofold. There's the explosion of retail—retail is the way most software is sold today. It's not as difficult as people think to be in retail.

If you have a title that people like, they'll just pick it up. For example, with Sidekick, at Starfish we came out with 2.0, and we became an instant retail hit. A lot of people said, "Oh, they'll never give you distribution at retail!" We got instant distribution, and we're already one of the two or three best-selling programs out there.

It's a bit like the hit in music—if you can't get your own label recognized, you can always find someone that will publish you if you have soemthing that's right there. That's what happens in the music business—you have this proliferation of labels out there. It's exactly the same story in software, that's what we're contending.

The second piece is the Internet, electronic distribution. We have our Web site up—our Web site is probably better than Microsoft's. Here we're thirty-five people, a $10 million company, and we can give as good service as this huge $4 billion company.

So what are you doing on your Web page?

We do tech support, we take orders. Not only do we take orders, we have downloadable thirty-day unlockable trial versions of our software. The problem with electronic distribution, though, is the size of what you want to distribute.

Which leads me to one of the principles that

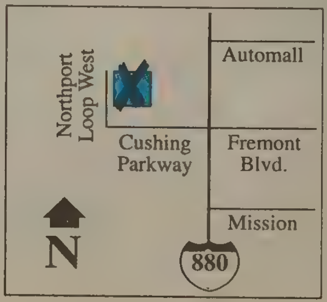
Setting a New Standard!
Get the
CALIBER
ADVANTAGE

- Caliber is ready with Microsoft Windows 95 and the latest in PCI Bus Technology
- Providing the Best in the Industry Since 1986
- Complete 2 Year Parts and Labor Warranty
- Complete Networking Services
- Microsoft Solutions Provider
- Special Corporate Services and Pricing
- GSA Pricing Available

CALIBER

(510) 353-1220

Fax (510) 354-2134

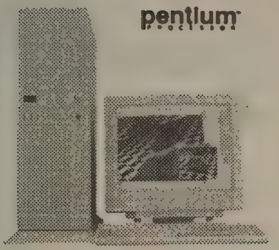


Northport Loop West
Automall
Cushing Parkway
Fremont Blvd.
Mission
N
880

Get the Best in Quality and Value!

All Systems are Novell Certified and FCC Class B Approved

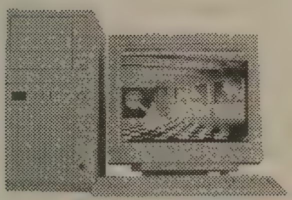
Voyager Server



- Pentium™ Dual Processor Motherboard (2nd cpu optional)
- EISA/PCI Slots
- Intel® Pentium™ CPU w/256K Cache
- 8MB Memory
- 540MB Seagate IDE Hard Drive
- PCI IDE Controller
- Diamond PCI VGA w/1MB
- 14" 1024x768 NI .28 SVGA Monitor
- 1.44 Floppy Drive
- Tower Case w/250W Power Supply
- Microsoft Mouse
- Microsoft Windows 3.11 & DOS 6.22

100MHz	$2179
90 MHz	$2069
75MHz	$1959

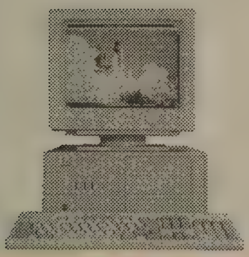
Voyager Workstation



- Pentium™ PCI/ISA Motherboard
- PCI/ISA Slots
- Intel® Pentium™ CPU w/256K Cache
- 8MB Memory
- 420MB Seagate IDE Hard Drive
- On Board PCI IDE
- On Board High Speed IO with 16550
- Diamond PCI VGA w/1MB
- 14" 1024x768 NI .28 SVGA Monitor
- 1.44 Floppy Drive
- Mid Tower Case w/230W Power Supply
- Microsoft Mouse
- Microsoft Windows 3.11 & DOS 6.22

66MHz	$1479
60MHz	$1449

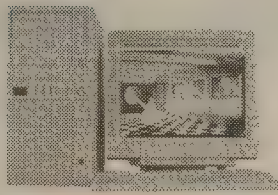
Viking Workstation



- 486 VESA/ISA Motherboard
- VESA/ISA Slots
- Intel® 486 CPU w/128K Cache
- 4MB Memory
- 420MB Seagate IDE Hard Drive
- VESA IDE IO
- VESA VGA w/1MB
- 14" 1024x768 NI .28 SVGA Monitor
- 1.44 Floppy Drive
- Desk Top Case w/200W Power Supply
- Microsoft Mouse
- Microsoft Windows 3.11 & DOS 6.22

DX4-100 MHz	$1139
DX4-75 MHz	$1109
DX2-66 MHz	$1069

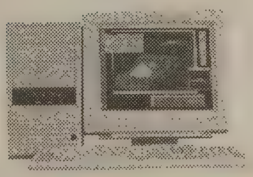
Voyager Super Workstation



- Pentium™ PCI/ISA Motherboard
- PCI/ISA Slots
- Intel® Pentium™ CPU w/256K Cache
- 8MB Memory
- 540MB Seagate IDE Hard Drive
- On Board PCI IDE
- On Board High Speed IO with 16550
- Diamond PCI VGA w/1MB
- 1.44 Floppy Drive
- 14" 1024x768 NI .28 SVGA Monitor
- Mid-Tower Case w/230W Power Supply
- Microsoft Mouse
- Microsoft Windows 3.11 & DOS 6.22

100MHz	$1789
90MHz	$1679
75MHz	$1569

Viking Server



- 486 PCI/ISA Motherboard
- PCI/VESA/ISA Slots
- Intel® 486 CPU w/256K Cache
- 4MB Memory
- 420MB Seagate IDE Hard Drive
- PCI IDE
- Hi Speed IO
- Diamond PCI VGA w/1MB
- 14" 1024x768 NI .28 SVGA Monitor
- 1.44 Floppy Drive
- Mini Tower Case w/200W Power Supply
- Microsoft Mouse
- Microsoft Windows 3.11 & DOS 6.22

DX4-100MHz	$1179
DX4-75MHz	$1149
DX2-66MHz	$1109

Upgrades

Monitors

SONY	
17se	$970
ACER	
14" 34T	$225
15" 56L	345
15" 71155	295
17" 76I	635
VIEWSONIC	
15"	$379
17"	769
20"	1459
21"	1699

CD-ROM'S

TOSHIBA	
4.4 Speed 3601 SCSI	$305
NEC	
3X Speed SCSI	$225
PLEXTOR	
4X Speed SCSI	$290
6X Speed SCSI	599

Keyboards

MicroSoft Natural	$95

Multimedia Kit Upgrade

All Kits Include:

•Acer Double Speed CD-ROM •AT Interface •Acer Magic 16-Git Sound Card

w/6 CD Titles:
MultiMedia Encyclopedia 6.0, '94 ver.
The Animals '94 ver.
Chess Master 4000 '94 ver.
World Atlas with Movies, '94 ver.
U.S. Atlas with Movies, '94 ver.
Mavis Beacon Teaches Typing 2.0
$189

w/5 CD Titles:
Microsoft Works
Microsoft Golf
Microsoft Encarta 95
Microsoft Entertainment Pack
Dangerous Creatures
$229

w/10 CD Titles
F-14 Tomcat
The Savage Empire
Mike Ditka Ultimate Football
Audubon Birds and Mammals
Test Drive III: The Passion
Dinosaur Safari
Freekin Funky Fuzzballs
The Magic Death: Vertial Murder 2
Links, The Challenge Golf
Imagination
$199

Pen-Based Tablet Upgrade

•Variety of sizes from 3"x4.5", 6"x6", 12"x12", 12"x18", & 24"x26"
•Perfect for CAD, and Graphics Applications
•Bundled with Software and Drivers

Starting at
$75

45800 Northport Loop West
Fremont, CA 94538

The Intel Inside logo is a registered trademark of the Intel Corporation.
Prices subject to change without notice. Not responsible for typographical errors.

MICROSOFT® WINDOWS™ READY-TO-RUN

yes NetWare Tested and Approved

CALIBER

"I don't think there's any opportunity for any small company to compete with Novell PerfectOffice or Microsoft Office.

It takes three hundred people to write this kind of stuff, and it's not even fun. It is *not* fun to do that."

we're focusing on in this company—Slimware.

If you have something that fits on four or five disks, download times are very long. If it's on a CD-ROM, forget it—electronic distribution just doesn't work.

The concept of Slimware ties in with online distribution, because the download times are reasonable. On CompuServe, Sidekick 2.0 is available for download, the full product, and people get charged on their CompuServe account. On CompuServe it's been extremely successful; on the Internet shopping network, I think we're the most successful product right now.

One of the reasons, I think, is that everyone's building these huge pieces of software, and we're focusing on figuring out how you can make software small, fast, and compact, and very usable. This idea of Slimware is the idea of focusing on 80% of the functionality of a piece of software, that really will make it successful, rather than adding the last 20%, which will turn a one-disk product into a six-disk product.

And give you nothing extra that you can use.

That you *really* use.

So the idea is radical simplification of things. One of the key guiding principles of what we're doing at Starfish is focusing on Slimware, focusing on communications and particularly on telephony, and everything that's happened with the merger of digital communications and computers.

It seems like with a company of thirty-five, you can take time to make things slim, but when you've got a company with hundreds or thousands, just the political pressures involved make things fatter and fatter.

That's true—but one of the things we're looking at is setting the culture in the company. We're thirty-five employees today; a month ago we were twenty. We're growing fast; in this business you have to grow to some extent, as you know from your own business.

The challenge is to set a culture, a modus operandi that gets people to focus on building this kind of products. It's not going to happen just because you're a small company and you get to have your hands on everything, but because people have interiorized that mission, are fully empowered to make it happen, and make it happen.

That's what we're focusing on. Simple rules: Thou shalt fit thy product on one diskette. That kind of immediately limits things. People say, "I have to do all these things, I need a new release, and I need to fit it all on one disk. That means I have to streamline things."

We're back to one of the things that I think is going to be very important—software craftsmanship. The kind of people we have building software here are not coders, they're architects and craftsmen.

That's very important, software craftsmanship. It forces people to not put in everything they can think about, but focus on the difficulty of software, which is minimalism. The issue is never what you should do, it's what you should not do. It's like a Miles Davis solo. It's got less notes. You can hear a lot of notes, but they're not played, right? It's this minimalist approach.

How much is this enabled by being able to use and reuse objects, and not having to write code from scratch all the time?

Some of the guiding principles here are to use an object-oriented architecture and to reuse code. For example, in a lot of software we have there is a communications component, because we do a lot of things that are going to be tied to communications. Those components are going to be reused. The more they're reused, the more they're streamlined, the more they're debugged, the more they're efficient.

On the time management side, there are components that get reused. Same thing with the storage components. So the ability to build software by components, and reuse these components and keep on streamlining some core components that we use, I think helps a lot, and will help a lot as we grow. That's part of the challenge, to keep that going, because the natural temptation of a software engineer is to say, "Oh, I'll rewrite this thing because I can do it better than these guys." It's never the case, but it's always an illusion.

It's not art history, it's craftsmanship. As such, we want people to be those craftsmen.

And as time goes on, you expect to have an increasing library of objects that will be the foundation of the various products?

That's correct. The idea is that as you evolve and grow, you have an increasing amount of these components that you reuse. Plug and play, wire them into different apps.

Do you see a lot of products that can be done on one diskette, or are you pretty much done with the two you have?

We see, indeed, a lot of products that can be done on a diskette. As a matter of fact, we think that most products can be done on a diskette, provided that we focus on what people really use.

If word processors nowadays were focused on what people really use, you'd probably need half of a diskette. You take 35MB, and what do you really use?

We're not trying to do a word processor. Word processing per se is not something you do. What you do is you write a letter. You write a piece of email. You compose a fax or build a newsletter.

The focus we have here is looking at solutions—what do people want to do?—and try to see if we can do a good job of streamlining that process. People don't really want a spreadsheet—they want to do their budget. But instead we've given them this incredibly complex tool called a spreadsheet from which they

Notebook Market Leader---LINDEN MICRO TECH
Proudly Introducing 2 NEW MODELS *9400* & *7600* series

❒ 9400-The Real 486 Multimedia Notebook w/Built-in CD-ROM

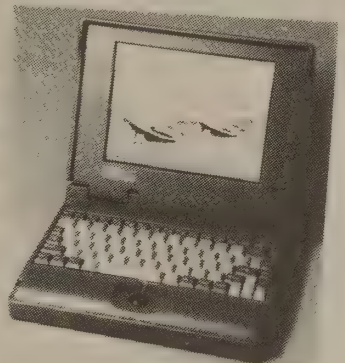
- Intel 486CPU, 4MB RAM Exp. to 64MB. 128KB Flash ROM, AMI BIOS. Optional 256KB/512KB/1MB Secondary Cache.
- 32-Bit Local Bus IDE, Removable FDD, Removabe 250/340/520/810MB HDD, 2 Type II PCMCIA Slots. 2S (16550), 1P (ECP/EPP),1 Game, ext. KB, Monitor, (for simul. display) & Docking Station Ports. Built-in Integrated Track Device
- 32-Bit VLB Video w/1MB RAM & Windows Accelerator. 10.3" Dual Scan, 9.5" or 10.4" Active TFT Display. Support up to 1280 x 1024, 16 Colors for ext. CRT. Optional TV Tuner Module.
- Built-in 16-Bit Stereo Sound System w/Microphone, 2 Stereo Speakers, Audio Amplifier w/volume control. Ext. MIC. & Speaker Jacks. Removable Double Speed CD-ROM Module. INTERLNK CABLE FOR FILES TRANSFER.
- Large NiMH Battery. (2nd & 3rd Battery optional for longer usage hours.) Supports MS APM 1.1 Power Management System. AC Adaptor, Carrying Case.

9400

250 MB HDD	Dual Scan	9.5" Active	10.4"Active
486SX-33	$2145	$2765	$3015
DX2-66	$2235	$2855	$3105
DX4-100	$2365	$2985	$3235

NP-9200 NOTEBOOK

- Intel CPU, 4MB RAM Exp. to 8/12/16/20/36MB, 128KB External Cache, 128KB Flash ROM, Award BIOS.
- VLB Display w/1MB RAM & Windows Accelerator on Board. 10.3" Dual Scan or 9.5" 64GS MONO, Active TFT Display, Ext. CRT up to 1024 x 768 256 Colors.
- 1.44MB FDD, Removable 250/340/520/810MB HDD. Type IV PCMCIA Slot. 1S (16550), 1P (ECP/EPP), ext. KB, ext. Monitor(Simultaneous Display) & Docking Station Ports. Large 25mm Built-in Trackball.
- Built-in Sound System Compatible to Sound Blaster Pro & MS Sound System. Built-in MIC & Speaker. Ext. MIC, Speaker, & Line-in w/volume control Jacks.
- 2 NiMH Battery Packs (total 33W, Hot Swap), AC Adaptor, Carrying Case, INTERLNK CABLE FOR FILES TRANSFER.



9200

250 MB HDD	Mono	Dual Scan	Active
486SX-33	$1330	$1730	$2360
DX2-66	$1420	$1820	$2450
DX4-100	$1540	$1940	$2570

1 Year Parts,
3 Years Labor
Warranty Plus

FREE
Lifetime
TECHNICAL SUPPORT

We Will BEAT
Any Notebook
Advertised
Price or
Written
Quotation +
$$$ For Your Effort.

Fastest
Turnaround
Services

NP-7600 PENTIUM 90 NOTEBOOK

❒ THE FASTEST MULTIMEDIA NOTEBOOK-MODEL 7600 PENTIUM 90MHz

- Intel CPU Pentium 75/90 MHz, 8MB RAM Exp. to 16/24/40MB. 256KB Secondary Cache, 128KB AMI BIOS.
- 32-Bit VLB Video w/1MB RAM & Windows Accelerator. 10.3" Dual Scan or 9.5" Active TFT Display. Supports Ext. CRT up to 1280 x 1024, 16 Colors or 1024 x 768 256 Colors.
- 1.44MB FDD. 32-Bit Local Bus IDE. Removable 250/340/520/810MB HDD. 2 Type II PCMCIA Slots.1S (16550), 1P (ECP/EPP), ext. KB, Monitor (simul. Display) & Docking Station ports. Buit-in 19mm Trackball.

7600

250MB HDD	PENTIUM 75	PENTIUM 90
Dual Scan	$2370	$2605
Active TFT	$2990	$3225

PCMCIA CD-ROM NOW AVAILABLE

- Double-Speed, Low Power CD-ROM Driver & a PCMCIA Interface Card

* 64K bytes Memory Buffer
* Average access Time 350ms
* Duble Speed Data Transfer Rate 307.2 K bytes/sec.

$298.00

SUPER BUY 486 & PENTIUM SYSTEMS $$$$$ BREAK THROUGH!!!
(3 Hours of Basic Training Course for only $45 with Purchase of Any Computer System.)

486 DX2-66 VLB SYSTEM

CPU, 256K Cache M/B, 8MB RAM, VLB IDE/IO, 540MB HD, Teac 1.44MB FD, 1MB VLB WIN. Accel. Video Card, 101 Key KB, 3-B Mouse w/Pad, Mini-Tower Case.
(Monitor sold separately)

$899

MULTIMEDIA PACKAGE $240

- Panasonic Double Speed CD-ROM
- Sound Blaster 16
- One Pair of 40W Speakers
- CD Deluxe Pak **(4 Titles)**

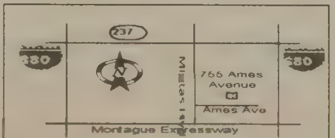
PENTIUM-90 PCI SYSTEM

CPU & M/B w/256K Cache, 8MB RAM, 540MB HD, Teac 1.44MB FD, PCI IDE/IO, 101 Key KB, Logitech 2-B Mouse w/Pad, Diamond Stealth 64 PCI 1MB Video Card, Mid-Tower Case. (Monitor sold separately)

$1545

TERMS AND CONDITION

■All systems include one year parts & three years labor warranty.■Purchase orders are welcomed and subject to approval.■Prices reflect cash discounts. ■Shipping and handling charges are extra and are not refundable. ■All returns subject to 15% restocking fee & cover only Linden Micro Tech brand computers,excludes peripherals and software.
■No returns after 30 days.■Defective items replaced or repaired at our discretion. ■Price & availability subject to change w/o notice.
■No responsible for typos.



LINDEN MICRO TECH
755 Ames Ave., Milpitas California 95035 ♦ Tel (408) 262-8200 ♦ Fax: (408) 262-8476
☆☆☆☆☆☆☆☆☆ Open Hours: Mon -- Fri: 9am--6pm, Sat: 10am--4pm ☆☆☆☆☆☆☆☆☆

have to derive their budget. It's not necessarily what most people would do.

We need to rethink, a little bit, how software works, and that's what Starfish is about, rethinking what people are trying to do, and analyzing what they are doing, and saying, "If that's what you're doing, is that the kind of software you need? Or would a piece of software that did this and this be a better deal for you?"

We're focusing on the solution, rather than have a solution looking for a problem. To a large extent those huge word processors are solutions looking for a problem, because most of us don't need to do endnotes with footnotes and cross-references across the document and multilevel subjects—when was the last time you did that? *[laughter]*

It wouldn't be so bad if you could use this stuff as modules when you needed them, but having to carry around all this excess baggage you'll never use is a pain.

That's exactly the point.

How did that happen? I think it happened because of a competition focused on winning comparative reviews in the *PC World*s, *PC Magazine*s of this world. It's a feature creep—"oh jeez, the other guys have the multilevel table of contents, and we need to have that!"

It's gotten ridiculous, and it's true for every category. It's true for your paint program. It's true for your draw program. People think they need Adobe Photoshop to do their usual little job, and it's not the case. We have gotten to the point where the box is heavier than the machine you run it on! *[laughs]* Your notebook computer is lighter than Microsoft Office!

Something's wrong!

It's starting to look like the UNIX manuals.

It is! It is! We're making fun of UNIX and all that stuff, but that's what we're doing. We're building this nuclear power plant when really what we want is a little bit of electricity and AA batteries do the job.

People will keep on buying those things and using them, but our focus here is radically differnt.

One myth we need to debunk here is that it's easier to write light software. It's not easier, it's harder.

It's like writing haiku for a living.

Exactly. It's being minimalist. You've got to spend a lot of time analyzing what people do, thinking through what people do. It's not like "I'm going to build a word processor so I have to do all these things." That's easy. Then you just try to fit it into a user interface. Here, it's "Oh, I only have one disk, and I need to solve this problem. How do I do this?"

It's much harder. You know this—writing something in one page is harder than writing the same thing in five.

I think that's an opportunity for people who have the creative juices and the impetus to make things happen. It's also an opportunity for smaller software companies to succeed. It's kind of the component software revolution.

Do you see the opportunity for small companies as being mostly niche markets, rather than competing head-on with the Microsofts and Lotuses in the mainstream applications?

I think there's a lot of opportunities like that, but I don't know what we call small niche anymore. Because if the big niche is Microsoft Office, Novell PerfectOffice, fine. But what will people use most of the time? It might not be those products, ultimately.

I don't think there's any opportunity for any small company to compete with Novell PerfectOffice or Microsoft Office. It takes three hundred people to write this kind of stuff, and it's not even fun. It is *not* fun to do that.

Are the people who buy Starfish products the same people that are buying Borland's?

No. Borland is now completely focused on the market for software developers worldwide, in partnership with companies such as Novell. That's who its customers are—ultimately professional software developers, or people who want to make a living that way.

Starfish is focused on everyone. What we're trying to do is software such that if you have a personal computer, you're going to want a copy of it. Hopefully we'll be able to let you know with some marketing vehicle that you might want one of our products, such as Sidekick or Dashboard.

Sidekick's an instant hit, though—it's done well for lo these ten years and never really disappeared from the scene.

It never disappeared, but we made one mistake.

In 1984 we invented this PIM category, and we didn't push it. We got distracted. That was probably one of our mistakes at Borland. Somehow we focused on this big developer-tool stuff, not realizing Sidekick, just like Quicken, was something that everybody could use, and we could be in that business.

Starfish is private now? You own some, and who else?

One hundred percent private. Me, and Sonia Lee, and the employees here, and Borland owns 10%.

No VC?

No VC, no venture capitalists.

Life is sometimes simpler that way.

Yeah—Borland never had venture capital. At Borland we did the antithesis of a usual startup—we started with nothing and ran it to $450 million, and never received any venture capital. It was one of the only software companies that way.

You're starting this company under somewhat different conditions than when you started Borland. There are some similarities of emphasis, like small-cheap-and-useful, the absence of hype, the lack of interest in feature wars—but the world is real different from what it was ten years ago.

In both cases, most people at the time, and today, are saying that it's impossible to do a new software company. In both cases, I think, they're wrong. They were obviously proven wrong before, and I think this time they're wrong also.

The dynamics are the same, yes. At the time, the dominators of the industry were Microsoft already; IBM, who was selling a lot of stuff; and Digital Research. Lotus was emerging when we started. Those were the players at the time. Today the players are Microsoft and a whole lot of other companies.

Why is it possible? We discussed that—it's that the channels of distribution are actually looking for other kinds of products, and customers are kind of tired of buying nuclear power plants every time they need to do something

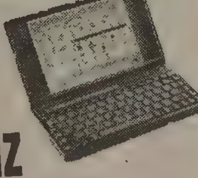
And besides, once you've bought it, you've bought it. You don't go into the computer store looking for a new word processor every few weeks.

You got it! You're looking for something else, such as Sidekick, such as Dashboard. We are focused 100% on software that will help you communicate, help you get organized. We're

continued on page 239

MORE COMPUTER BUYS FROM FRY'S!

HEWLETT PACKARD
Authorized Dealer



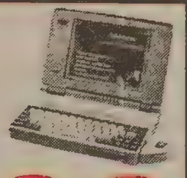
OmniBook 600C
486DX2-50MHz
Superportable Color PC

- 486DX2-50MHz CPU
- 4MB RAM
- 170MB Hard Drive
- 1MB VRAM
- 2 PCMCIA Type II Slots
- MS DOS Color Display
- MS Windows
- Laplink Remote Access

$2699

#1976504

TOSHIBA T2100
486DX2-60MHz
4MB/260MB NOTEBOOK



- 486DX2-50MHz Processor
- 4MB RAM
- AccuPoint integrated pointing device
- Full size keyboard
- 9.5" STN Mono LCD display
- Supports two Type I-II, or one Type III PCMCIA Card
- 6.6lbs.

$1499

#2007047

Avanti

486DX2-66MHz
340MB COLOR NOTEBOOK

- 486DX2-66MHz
- 4MB RAM
- 340MB Hard Drive
- MS DOS
- MS Windows
- PCMCIA II
- Trackball

$1999

#2001605

COMPAQ

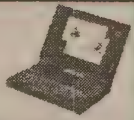
486DX2-40MHz
CONTURA 400CX 250MB ACTIVE COLOR NOTEBOOK

- 486DX2 40MHz CPU
- 250MB Hard Drive
- 4MB RAM
- 3.5" 1.44MB Floppy Drive
- Active Matrix Color
- PCMCIA
- Trackball

$2699

#1962747

SHARP



486DX2-50MHz
MULTIMEDIA 250MB ACTIVE MATRIX NOTEBOOK

- 486DX2-50MHz CPU
- 250MB Hard Drive
- 4MB RAM
- 1.44 Floppy Disk Drive
- 16-Bit Sound
- Microphone
- Glide Pen

PC-8700
#1972108

$2399

AST COMPUTER

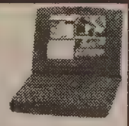
486DX2-50MHz
COLOR NOTEBOOK

- Ascentia 800N
- 486DX2-50MHz
- DSTN Color
- 4MB RAM
- 340MB Hard Drive
- 1.44MB Floppy Drive
- PCMCIA
- Trackball

$1999

#2012883

NEC
UltraLite Versa S/33D



486SX-33MHz
DUAL SCAN COLOR NOTEBOOK

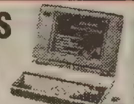
- 4MB RAM
- 210MB Hard Drive
- External Floppy Drive
- PCMCIA II
- DOS
- Windows™

Limited to Stock on Hand!

$1495

#1979932

TOSHIBA T1960CS
486DX2-50MHz
DUAL SCAN COLOR NOTEBOOK



- 486DX2-50MHz
- 200MB Hard Drive
- 3.5" 1.44MB Floppy Disk Drive
- PCMCIA
- Dual Scan
- Passive Matrix Color Screen

$2297

#1929498

HIGH-SPEED I/O IDE CONTROLLER

- 16550 Serial w/ 2.88MB FDD w/IDE Interface
- Hi-Speed16550 Serial
- Hi-Speed EPP/ECP Parallel
- IDE Interface up to 2.88MB Floppy Controller Game Port

$59.95

SIIG

#1884423

Canon

BJ-10SX
NOTEBOOK PRINTER

360 dpi • 110 cps • 3.7lbs
30% Faster than BJ-10EX.
Remanufactured to factory specifications.

$158

#1951259

Pocket Jet
Portable PC Printer

- Lightest weight - only 1 lb. including battery
- Smallest size - fits in your pocket
- Direct thermal printing
- 300 x 300 dpi
- 3 pages per minute at 5% coverage
- HP LaserJet IIP (PCL4) emulation
- 7 HP internal fonts & downloadable fonts

$498

PENTAX
TECHNOLOGIES

#1995152

TARGUS
A TRADITION OF EXCELLENCE

NOTEPAC
Notebook Carrying Case

- 14" x 11" x 2.5" (Interior Dimensions)
- 13" x 9" x 2" (Pocket Dimensions)
- Compatible with Powerbook and all popular Notebooks.
- Available In Assorted Colors.

$29.99

#1693283

LINKSYS PCMCIA COMBO

Supports10Base 2 and 10 Base T and BNC COAX • 16K Buffer
128KB Flash Buffer

$189.95

#1936476

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

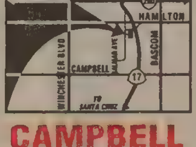
Fry's ELECTRONICS

Prices Good Through May 23, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers


TO OAKLAND
TO S.J.
880
280
HAMILTON
WINCHESTER BLVD
CAMPBELL
BASCOM
17
TO SANTA CRUZ

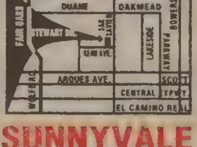
CAMPBELL
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595

AUTOMALL PARKWAY
PLEASANTON
MISSION CT.
MISSION BLVD.
880
680
237
CALAVERAS
SAN JOSE
MILPITAS

FREMONT
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

S.F.
101
TO S.J.
PARK
ASH
PORTAGE
LAMBERT
EL CAMINO REAL
280
TO S.J.

PALO ALTO
340 Portage Road
((415) 496-6000
(415)496-6044


TO S.F.
101
TO S.J.
DUANE
OAKMEAD
BOWERS
FAIR OAKS
STEWART DR.
SAN XAVIER
KERN AVE.
LAKESIDE
PARKWAY
WOLFE RD.
ARQUES AVE.
SCOTT
CENTRAL EXPWY
EL CAMINO REAL

SUNNYVALE
1177 Kern Ave.
(408) 773-1770
(408) 735-6950

DISCOVER NOVUS
VISA
MasterCard
ACCEPTED

486 VESA LOCAL BUS MOTHERBOARD

- 2 Vesa Local Bus Slots
- 486 Motherboard
- 0K Cache, expandable to 128K
- CPU Sold Separately

$59

#1988543

DEEP GREEN SUPER DELUXE 486 VLB MOTHERBOARD

$169

- 486 VESA Local Bus Motherboard
- 256K Cache
- 3 VESA Local Bus Slots
- 32-Pin and 72-pin simm sockets
- Zif Socket
- Super Deluxe

#1993404

486DX4-75/100MHz VESA LOCAL BUS MOTHERBOARD

$139

- VLB 486DX4 Motherboard
- 256K Cache
- Uses 486DX-4/75MHz or 486DX-4/100Mhz
- CPU Sold Seperately

#1928073

MINI TOWER COMPUTER CASE

WITH POWER SUPPLY

$39.95

#1742428

PENTIUM 75MHz

QUAD-SPEED MULTIMEDIA COMPUTER

- 8MB RAM
- 850MB Hard Drive
- 14.4 Fax/Modem w/Voice Mail
- Quad-Speed CD-ROM
- DOS
- Windows
- CD Titles

Monitor Sold Separately

$1899

#1998856

486DX4-100MHz

4MB/540MB MULTIMEDIA SYSTEM

- 4MB RAM
- 540MB Hard Disk
- 1.44 Floppy Drive
- 2X CD-ROM
- 16 Bit Sound Card
- Speakers
- Fax/Modem
- DOS
- Windows™
- CD Titles
- Mouse

Monitor Not Included

$1399

#1998845

486DX2-66MHz 420MB SYSTEM

- 486DX2-66MHz Slimline Desktop
- 4MB RAM
- 420MB Hard Drive
- 1.44MB Floppy Drive
- Mouse
- DOS
- Windows™

Monitor Not Included

Leading EDGE

$899

#1962769

PENTIUM 100MHz

QUAD-SPEED MULTIMEDIA COMPUTER

- 8MB RAM
- 1 GB Hard Drive
- 14.4 Fax/Modem w/Voice Mail
- Quad-Speed CD-ROM

Monitor Sold Separately

$2695

#1998878

BJ-200EX

BUBBLE JET PRINTER

- Laser Quality Text and Graphics
- Fast Print Speed and Compact Design
- Quieter than a Laser
- 20 TrueType Fonts Included
- 720 x 360 dpi on Plain Paper
- Automatically Feeds 100 Sheets, 50 Transparencies or 15 Envelopes

Canon

$229

#1998052

TRUE 600 DPI RESOLUTION

LASER PRINTER

- Straight Papre Path Technology prints on a wide variety of stocks and sizes
- 2MB RAM upgradeable to 10MB via standard SIMMS
- 6 PPM printer engine
- 25 MHz microprocessor
- Includes 61 fonts
- Microfine tone included

HL-660
#1981627

We're at your side.
brother

$689

Fry's ELECTRONICS

DATA STORAGE CORNER

MEMOREX
COMPUTER SUPPLIES

3.5" DS/HD HIGH DENSITY IBM FORMATTED DISKETTES

10 Pack

$4.99*

*After $2 Mail-In Rebate. In-Store Price... $6.99 Plus Tax.

#1904268

MEMOREX
COMPUTER SUPPLIES

3.5" DS/HD HIGH DENSITY MAC FORMATTED DISKETTES

10 Pack

$4.99*

*After $2 Mail-In Rebate. In-Store Price... $6.99 Plus Tax.

#1904279

1024 X 768 14" SUPER VGA MONITOR

024 X 768
39 Dot Pitch
nterlaced

$169

983238

SVGA 16-BIT 1024x768 SUPER VGA CARD

- 1024x768
- 256K expandable to 512K RAM

$29.99

#1611564

Non-Interlaced 14" SUPER VGA MONITOR

- 1024 X 768
- .28mm dot pitch
- Non-interlaced
- One Year Warranty

$199

#1657506

Parana

752 INK REFILL BLACK TWIN PACK

for HP 51626A cartridge HP DeskJet and DeskWriter series

$14.99

#1889015

MOUSE ARENA

Ergonomic design to help reduce wrist fatigue
Leather cushion
Metal support for mouse cable
yronTM work surface
djusts for left or right-handed users
Black finish only

$12.99

887987

FORMINCO

EasyPainter

Input for DTP, Art Work, and Graphics
Features Include:

- Easy drawing, tracing pictures, and drawing free hand ability
- Working Area: 5" x 5" (127mm x 127mm)
- Resolution: 1016 LPI
- Baud Rate: 9600 BPS
- WINTAB Windows™ Driver
- DOS Tablet Driver
- Advanced ADI (AutoDesk Drive Interface) Driver

$98.99

Genius

#1963520

BYTE BROTHERS COMPUTER LOCK

Includes:

- Security Fasteners of all metal construction, designed for easy installation.
- Generous 7' cable made of flexible 3/16" steel, coated with putty colored vinyl.
- Heavy-Duty padlock.

$34.99

#1889901

labtec

MULTIMEDIA COMPUTER SPEAKERS

High efficiency micro stereo speakers.

- 2.25" stereo speakers
- 4 ft. cord with 3.5mm stereo plug to fit most personal radios and cassette players
- One year warranty

$4.77

SS11
#1931013

ENSINGTON.

OTEBOOK RAVELER TOTE

s adjustable notebook features padded npartments (to accomodate different nputer sizes; removable, adjustable ulder straps; and a rugged outer shell.
5" x 10.5" x
(Internal
ensions)
time
rranty

$34.99

388265

KENSINGTON.

POWER BACKER PLUS

300VAUPS protects against surges, brownouts, and blackouts. Protect Your Data!

$79.99

#1976478

101-Key AT Style KEYBOARD

$8.99

#1950960

DIAMOND

SPEEDSTAR PRO ISA 1024 X 768 24-BIT WINDOWS ACCELERATOR

- Cirrus 5428 graphics controller
- 1MB DRAM fixed
- Displays up to 256 colors at 1024 x 768 resolution and up to 16.7 million colors at 640 x 480
- Flicker-free refresh rates up to 72 Hz
- Excellent entry-level accelerator

$89.95

#1804083

Antec

PCMCIA CARD READER

- Internal Drive for PC
- 2 PCMCIA Slots
- Type I through 4
- 2 type II or 1 type III or IV

$99.95

#1993792

terex
puter Products

OWER ENTER

TH FAX MODEM PROTECTION

outlet surge protector
individual controls
ghted
aster
n/off
witch.

$17.49

76456

2-WAY DATA SWITCH BOX

- High quality rotary switch. no power required.
- Female connectors with gold plated contacts.
- Fully shielded metal case with anti-skid feet

$2.99

#1950764

SAGITTA COLOR HAND SCANNER

Features:

- 100 to 800 dpi resolution
- True RGB color producing 16.8 million color(24 Bit total)
- 256 True gray scale scanning
- 64 gray levels (dithered)
- Unlimited halftone patterns
- Scalable halftone size
- 4.13" scanning width
- Scanner Interface Card

$169

QTRONIX

#1938124

ScanTrac

Guide for Handheld Scanner

- Increase your OCR's speed to recognize text.
- Scan both sides of a page without moving the artwork.
- Compatible with PC and MAC scanners.
- Designed to achieve flatbed accuracy at a fraction of the cost.
- Easy to assemble.

$26.99

#1639937

MULTIMEDIA FILE BOX

Holds 100- 3.5" or
70- 5.25" or
16- CD-ROM or
7- standard or
16 Mini Data Cartridges

MicroComputer Accessories, Inc

$4.99

#1914559

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

Fry's ELECTRONICS

Prices Good Through May 23, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS!

MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers

TO OAKLAND
TO S.J.
HAMILTON
WINCHESTER BLVD
CAMPBELL
BASCOM
17
TO SANTA CRUZ

CAMPBELL
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595

AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
CALAVERAS
MILPITAS
SAN JOSE

FREMONT
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

S.F.
101
TO S.J.
PARK
ASH
PORTAGE
EL CAMINO REAL

PALO ALTO
340 Portage Road
((415) 496-6000
(415)496-6044

TO S.F.
TO S.J.
DUANE
OAKMEAD
KERN AVE
ARQUES AVE.
CENTRAL EXPWY
EL CAMINO REAL

SUNNYVALE
1177 Kern Ave.
(408) 773-1770
(408) 735-6950

DISCOVER NOVUS
VISA
MasterCard
ACCEPTED

Authorized Reseller

Macintosh® Accessories

Authorized Reseller

Apple® Macintosh® Performa® 475 4/160

68LC040 Processor • 50/25 MHz Speed • 4MB RAM Expandable to 36MB 160MB Hard Drive • 256 Colors • 7 SCSI Built-in 14" RGB .28mm Non-Interlaced Display • AppleTalk® / LocalTalk® • Digital Sound and Internal Speaker Sound Out Port • 2400 BPS Data S/R Modem/ 9600 BPS Fax Send • Keyboard • Mouse **Free Software:** System 7.1P with Launcher, ClarisWorks 2, Quicken 4, At Ease, MacLink Translators Pro, Click Art Performa Collection, Macintosh PC Exchange, Apple Special Edition of American On-line, American Heritage Dictionary 3rd Edition, Mario Teaches Typing, Spectre Challenger, Super Munchers.

$1097

#1942693

Apple® Macintosh® Performa® 575 5/250/CD

68LC040 @ 33 MHz Processor • 250MB Hard Drive • 5MB RAM Expandable to 36MB • 1MB VRAM • 14" Integrated Macintosh® Color Display with Trinitron Tube • Internal AppleCD 300i Plus CD-ROM Drive • Keyboard • Mouse **Free Software:** System 7.1P with Launcher, ClarisWorks 2, Quicken 4, At Ease, Click Art Performa Collection, Macintosh PC Exchange, Apple Special Edition of America On-line, American Heritage Dictionary 3rd Edition, Mario Teaches Typing, Spectre Challenger, Super Munchers, Best of Homeworks Templates **CD-ROM Titles:** Grolier's Encyclopedia 1993 Time Magazine Almanac Microsoft® Dinosaurs • Wacky Jack's CD Game Show

$1497

#1957738

Apple® Macintosh® Performa® 630CD 8/250

68LC040 @ 66/33 MHz Processor 8MB RAM Expandable to 36MB 250MB Hard Drive 32,768 Colors • 7 SCSI Built-in • 14" Apple .28mm Non-Interlaced Display • AppleTalk® / LocalTalk® Double-Speed Internal CD-ROM • 16 Bit CD Stereo • Internal Stereo Speakers Headphone Jack • Global Village • Fax / Modem. **Free Software:** Mac System 7.1P with Quicktime Player Claris Works 2 • Quicken 4 • At Ease • MacLink Plus Translators Pro • Click Art Performa Collection • MAC PC Exchange • New Grolier Multimedia Encyclopedia on CD Time Almanac CD • 3D Atlas CD • Family Doctor CD American Heritage Dictionary • Kid Works • Thinkin' Things Writing Center Wacky Jacks CD Game Show • Spectre Challenger • Spin Doctor Challenge • Dole Five-A-Day Adventures CD • Cross Wizard

$1597

#1942729

Apple® Macintosh® Performa® 638CDV 8/350

68LC040 @ 66/33 MHz Processor • 8MB RAM • Expandable to 36MB • 350MB Hard Drive • 32,768 Colors • 7 SCSI Built-in • 15" Apple .28mm Non-Interlaced Display AppleTalk® / LocalTalk® • Double-Speed Internal CD-ROM • 16 Bit CD Stereo • Internal Stereo Speakers Headphone Jack • FAX/Modem • Built-in Video/TV System **Free Software:** Mac System 7.1P with Quicktime Player Claris Works 2 • Quicken 4 • At Ease • MacLink Plus Translators Pro • Click Art Performa Collection MAC PC Exchange • New Grolier Multimedia Encyclopedia on CD Time Almanac CD • 3D Atlas CD • Family Doctor CD American Heritage Dictionary • Kid Works • Thinkin' Things Writing Center • Wacky Jacks CD Game Show • Spectre Challenger • Spin Doctor • Challenge Dole Five-A-Day Adventures CD Cross Wizard

$1997

#1942730

PowerPC™ Apple® Power Macintosh™ 6100/66 8MB/350HD

PowerPC 601 RISC at 66 MHZ • 256K level 2 cache, integrated FPU 8MB RAM expandable to 72MB • 350 Hard Drive • Built-in LocalTalk and Ethernet connections • 2 serial ports (both Geo-Port compatible) • SCSI port • ADB port, 2 monitor port • 16-bit stereo I/O port • Built-in Apple® SuperDrive • 1.4MB Floppy disk drive reads, writes formats Macintosh®, Windows, MS DOS, OS/2 and ProDos disks

Monitor and Keyboard not included

*Power PC™ is a Trademark of International Business Machines Corporation usedunder liscense there from.

$1697

#1988370

Apple® Macintosh® Performa® 6115CD 8/350

60MHz PowerPC™ 601 Processor • 8MB RAM Expandable to 72MB 350MB Hard Drive • 15" Apple® Multiple Scan Display w/Built-In Speakers • AppleTalk® / LocalTalk® • Double-Speed Internal CD-ROM Global Village 14,400 BPS Modem

Free Software: Mac System 7.5 • Claris Works 2 • Quicken 4• American Heritage Dictionary • Now Up To Date/Contact • Click Art Performa Collection • Mac Gallery Clip Art • Macintosh PC Exchange • MacLink Plus Easy Open Translator • E-World • Grolier's Multimedia Encyclopedia CD • Time Almanac CD • 3D Atlas CD • Family Doctor CD • Around the World in 80 Days • Kidsoft • Spectre Challenger • Spin Doctor Challenge

$2397

#1966682

PowerPC™ APPLE® POWER MACINTOSH™ 6100/66/16MB/500HD/DOS/CD

PowerPC 601 RISC at 66 MHZ • 256K level 2 cache, integrated FPU 16MB RAM expandable to 72MB • 500 Hard Drive Double-Speed internal CD-ROM • Built-in LocalTalk and Ethernet connections • 2 serial ports (both Geo-Port compatible) • SCSI port ADB port, 2 monitor port • 16-bit stereo I/O port • Built-in Apple® SuperDrive • DOS compatibility card • 1.4MB Floppy disk drive reads, writes formats Macintosh®, Windows, MS DOS, OS/2 and ProDos disks

Monitor and Keyboard not included

*Power PC™ is a Trademark of International Business Machines Corporation usedunder liscense there from.

$2597

#2010386

PowerPC™ Apple® Power Macintosh™ 7100/80 8MB/500HD

PowerPC 601 RISC at 80 MHZ • 256K level 2 cache, integrated FPU 8MB RAM expandable to 136MB • 500 Hard Drive • Built-in LocalTalk and Ethernet connections • 2 serial ports (both Geo-Port compatible) • SCSI port • ADB port, 2 monitor port • 16-bit stereo I/O port • Built-in Apple® SuperDrive • 1.4MB Floppy disk drive reads, writes formats Macintosh®, Windows, MS DOS, OS/2 and ProDos disks

Monitor and Keyboard not included

*Power PC™ is a Trademark of International Business achines Corporation used under liscense there from.

$2727

#1988392

PowerPC™ Apple® Power Macintosh™ 7100/80/CD/AV 16MB/700HD

PowerPC 601 RISC at 80 MHZ • 256K level 2 cache, integrated FPU 2MB VRAM Video input/output • 700 Hard Drive • Double-Speed internal CD-ROM • Built-in LocalTalk and Ethernet connections • 2 serial ports (both Geo-Port compatible) • SCSI port • ADB port • 2 monitor port • 16-bit stereo I/O port • Built-in Apple® SuperDrive • 1.4MB Floppy disk drive reads, writes formats Macintosh®, Windows, MS DOS, OS/2 and ProDos disks

Monitor and Keyboard not included

*Power PC™ is a Trademark of International Business Machines Corporation used under liscense there from.

$3599

#1988417

MAGNAVOX 640 x 480 14" MAC COLOR MONITOR

.28 Dot Pitch
640 x 480
Includes Cable

$267

CM2080
#1748516

Apple® 17" Color Multiple Scan Display

- Multiple-scan technology allows you to adjust resolution
- 17-inch screen Sony Trinitron tube
- Comes with a tilt-and-swivel base that allows you to position the monitor for optimal viewing comfort
- Complies with the EPA's EnergyStar conservation guidelines
- Adjustable resolution through software (included): Selectable from 640 by 480 pixels to 1024 by 768 pixels

$977

#1925508

RasterOps CLEARVUE 20" COLOR MONITOR

20" Trinitron Color Display.
Super fine .30mm dot pitch, supports from 640x480 to 1280 x 1024 with microprocessor controlled user-definable settings and automatic degaussing. Meets MPR II standards. LCD panel and anti-glare screen.

$1797

#2013437

Apple® 20" Color Multiple Scan Display

- Multiple-scan technology allows you to adjust resolution
- 20-inch screen Sony Trinitron tube
- Comes with a tilt-and-swivel base that allows you to position the monitor for optimal viewing comfort
- Complies with the EPA's EnergyStar conservation guidelines
- Adjustable resolution through software (included): Selectable from 640 by 480 pixels to 1152 by 870 pixels

$1977

#1897131

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®

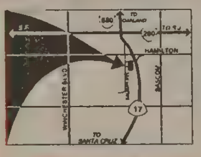
Fry's ELECTRONICS

Prices Good Through May 23, 1995

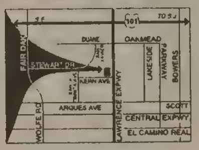
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

CORPORATE P.O. FAX #



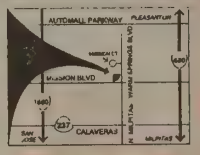
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595



Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950

S.F.
101
TO S.J.
PARK
ASH
PORTAGE
PAGE MILL RD
EL CAMINO REAL
280
S.F.
TO S.J.

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044



Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

DISCOVER NOVUS
VISA
MasterCard

Discover, VISA and MasterCard Accepted

Authorized Reseller

Macintosh Accessories

Authorized Reseller

TELEPORT

Teleport Gold II 14.4 Fax Modem for Macintosh®

Includes award winning Global Fax Software.

Global Village Communication

$129

#1979024

ERGONOMIC TRACKBALL for Macintosh®

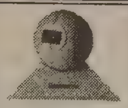
- Ergonomic and Artistic Design
- 3 Button, ADB, 320 dpi

$47

#2010238

CONNECTIX QUICKCAM

Digital Video Camera for Macintosh®



- CCD-based digital video camera with microphone
- Resolution up to 320x240 pixels
- QuickTime movie recorder and editor
- Still picture capture utility
- After Dark™ compatible video screen saver module
- Desktop photo gallery application
- Camera Stand

$97

#1990227

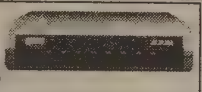
Quad-Speed External Multimedia CD-ROM Kit for Macintosh®

- External Quad-Speed CD-ROM Drive w/600kb/s Transfer and 150ms Access
- Groliers Encyclopedia CD-ROM
- Oceans Below CD-ROM
- Speakers and Headphones

$399

Spirit 4x
#2002307

ZOOM



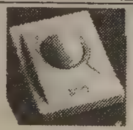
28.8 V.34 MACINTOSH® EXTERNAL FAX/MODEM

- V.42bis/ V.42/ MNP2-5, and 10
- Microphone LT software
- High-speed serial cable
- 7-year warranty

$197

#2005942

KENSINGTON.



MAC TURBO MOUSE TRACKBALL

ADB Trackball for all MACS with an ADB port.

$99

#1711392

GRAVIS MOUSE STICK MAC

- 3 Fire Buttons
- Adjustable Tension Controls

$47

#1440168

MULTIMEDIA CD-ROM KIT FOR MACINTOSH®

- Double-Speed NEC CD-ROM Drive
- Kodak Photo CD Compatible
- Multimedia Encyclopedia
- Speakers

$199

#1886171

COREL®

Corel Draw Gallery 1.0

Corel Draw Gallery will flair to your word processing and presentations with over 10,000 clipart images. It includes corel professional photo sampler.

$35.95

MAC
#1923517

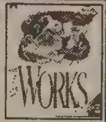
Softkey

KEY CAD COMPLETE

Key CAD Complete is the next generation that puts high performance CAD at your fingertips. You can produce drawings, plans and layouts to perfect scale and accuracy. But that's only the beginning, with Key CAD Complete the only limit is your imagination.

$24.95

MAC
#1962965



MICROSOFT® WORKS 4.0 FOR MAC

Gives you the right tools for your home, school, or business needs- word processing, financial analysis, database management, charting, and illustration, plus a new calendar to hip you keep track of appointments.

$99.95

MAC
#1920488

Intuit

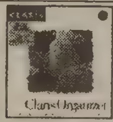
QUICKEN 5.0 for MACINTOSH®

The best-selling financial software just got better. Quick and easy in organizing your finances, loans, investments, budgeting and planning.

$39.95

MAC
#1955921

CLARIS



CLARIS ORGANIZER for POWER MACIINTOSH®

Claris Organizer software is the all-in-one, intelligent personal information manager. It seamlessly integrates your calendar,. contracts, tasks, and notes into one intuitive, compact solution.

$69.95

Power MAC
#2000855

Broderbund

PRINT SHOP DELUXE for MACINTOSH®

Print Shop designs and prints cards, stationery, flyers, calendars and banners.

$49.95

MAC
#1850062

BERKELEY SYSTEMS

After Dark 3.0 for Mac

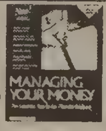
The best in screen saver software, just got better with:

- Over 30 displays, 15 of them are new.
- Ecologic power manager
- Multi-module
- Password protection
- Power Mac compatible

$29.95

MAC
#1933392

meca®



Managing Your Money

is simply the best way to take control of your financial life. It makes bill paying fast and easy... manages any investment... helps you survive the newly-complicated tax laws... and gives you every financial management tool you need to get serious about taking control of your money.

$39.95

MAC 6.0
#1974661

Apple® Macintosh® System 7.5

New System 7.5 boosts your productivity and enables you to collaborate with others more effectively. It speeds up repetive tasks, lets you swap files with PCs and allows you to open Macintosh, DOS, or Windows documents.

Authorized Reseller

$99.95

MAC
#1949885

Microsoft® Word 6.0 Upgrade for MACINTOSH®

Special upgrade for users of Microsoft Word 5.0/5.1 or earlier.

$124.95

MAC
#1951455

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®

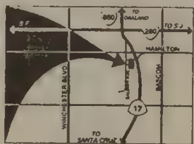
Fry's ELECTRONICS

Prices Good Through May 23, 1995

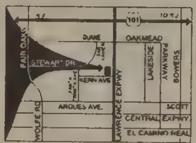
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

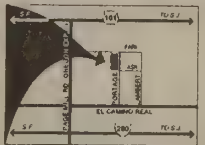
CORPORATE P.O. FAX #



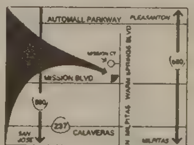
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595



Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950



Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044



Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

DISCOVER NOVUS
VISA
MasterCard

Discover, VISA and MasterCard Accepted

Authorized Reseller

Apple® Powerbooks® and Software

Authorized Reseller

Apple® PowerBook® 150 4/120

The Apple® PowerBook® 150 is the most affordable PowerBook® computer, combining the performance of 33-MHz Motorola 68030 microprocessor with the convenience of a compact, lightweight notebook system.

- 9.5" diagonal, backlit passive matrix, grayscale display
- 120MB Hard Drive
- 5.5 lbs
- Bundled Software: ClarisWorks 2.1
- PowerBook® Mobility Bundle Software

Authorized Reseller

$999

#1939538

Apple® PowerBook® 520 4/240

68LCO40 Processor • 50/25 MHz Speed 4MB RAM, expandable to 36MB,4MB on board and one memory expansion slot • Internal Apple SuperDrive® Floppy Disk Drive, Internal 240MB Hard Disk Drive • Three expansion slots- One for a processor-direct card, One for an internal modem, and One for RAM • Serial port • ABD™ port • Video-output port • Power adapter port • Sound-input (mono) port and integrated microphone • Sound output (stereo) port and speakers • SCSI port.

Authorized Reseller

$1797

#2009083

Apple® PowerBook® 520c Color 4/240

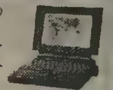
68LCO40 Processor • 50/25 MHz Speed Passive Matrix Color Display • 4MB RAM, expandable to 36MB • Internal Apple SuperDrive® Floppy Disk Drive, Internal 240MB Hard Disk Drive Three expansion slots- One for a processor direct card, One for an internal modem, and One for RAM • Serial port ABD™ port Video-output port • Power adapter port Sound-input (mono) port and integrated microphone Sound output (stereo) port and speakers SCSI port.

Authorized Reseller

$2297

#2009094

Apple® PowerBook® 540c Color 12/500/M



68LCO40 Processor 66/33 MHz Speed • 12MB RAM • Apple SuperDrive® Floppy Disk Drive • 500MB Hard Drive • Internal Modem • Three expansion slots- one for a processor-direct card, one for an internal modem, and one for RAM • Serial port • ADB™ port Video-output port Power adapter port • Sound-input (mono) port and integrated microphone Sound output (stereo) port and speakers • SCSI port.

Authorized Reseller

$4499

#1991181

GLOBAL VILLAGE POWER PORT PLATINUM 28.8 FAX/MODEM POWERBOOK® Ixx

- 28.8 v.34 modem
- 14.4 send/receive fax
- Global Fax™ OCR software

NEW

$337

#2012687

RENO PORTABLE EXTERNAL CD-ROM FOR MACINTOSH®

Features:

- SCSI-2, Double Speed, 180ms Portable CD-ROM Player
- Portable: Works with AC Adapter or Batteries
- Photo CD Multi-session Ready
- Includes Stereo Headphones, Carrying Case, ACAdapter, and Cables
- Includes Apple SCSI PowerBook Adapter
- Includes FWB CD-ROM Toolkit

$279

MV-450
#1988071

GLOBAL VILLAGE 19.2 FAX/MODEM FOR APPLE® POWERBOOK 500

Global Village Communication

$329

#1938479

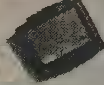
Apple® PCMCIA Adapter

Works on all 500 series PowerBooks®

$247

#1982318

ALPS GLIDEPOINT FOR MACINTOSH®



- Intuitive cursor control at your fingertips
- Replaces mouse or trackball
- "Taps" for instant selection
- Three-button versatility

$87

#2006828

SYMANTEC.

NORTON UTILITIES 3.1 For Macintosh®

The Norton Utilities is the most powerful collection of tools ever developed for protecting and recovering your data. It proactively prevents trouble by alerting you when problems arise. It recovers data when disaster strikes. It even rescues data from totally trashed disks.

$109.95

MAC #1955644

MAXIS

SimTower

SimTower is a simulation of the happenings inside a towering skyscraper. As owner and landlord of the building, your objective is to construct and develop a balanced and profitable piece of commercial real estate by leasing out space inside your tower for apartments, offices, restaurants, shops, and entertaiNent centers.

$34.95

MAC
#1973877

Ventana Press Internet Membership Kit

contains everything you need to put a sleek graphical interface on the information highway and start cruising. FREE ACCESS OFFER: One month plus 6 hours free from CERFnet

$27.95

MAC
#1930986

VEGAS GAMES FOR MAC

Vegas games entertainment package for Macintosh brings the Multi-player aspect of true casino games to your computer wherever and whenever you want. It comes with five complete games:

- Craps
- Poker
- Baccarat
- Blackjack
- Horse Racing

$19.95

MAC
#1902004

CompuServe

Value Pack for Macintosh®

Whether you're a current member of CompuServe, or joining now, you're going for the ride of your life on the information superhighway! This CompuServe Value Pack contains everything you need to get the most out of service.

$25.95

MAC
#1999330

Broderbund

MYST CD-ROM FOR MAC

Myst is an adventure game unlike any other, with stunning 3-D photo realistic worlds. Myst is a surrealistic exploration, where every vibrant rock, scrap of paper and sound may hold vital clues to your unraveling a chilling tale of intrigue and deceit.

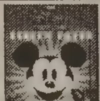
Mouse, hard disk, System 7.01 or higher and a CD-ROM drive required

$49.95

MAC
#1838260

BERKELEY SYSTEMS

THE DISNEY COLLECTION SCREEN SAVER



The Disney Collection Screen Saver will take you to the magical world of Disney with your favorite characters. Includes five classic Disney songs and over 15 colorful animated Disney displays.

$29.95

MAC
#1819863

CLARIS

FILEMAKER PRO 2.1 FOR MAC

with more than 50 new features, FileMaker Pro for Macintosh® gives you even more for scripting, data management, and computing across workgroups. And add impact to your files with QuickTime movies!

Get FREE Fed Ex Letter and Fed Ex Tracking Software Offer!

$98.95

MAC
#1957037

DELRINA

FaxPro For Macintosh®

You can conveniently send faxes directly from your Mac. And, you'll also receive faxes directly into your computer so they'll never sit unnoticed.

Authorized Reseller

$59.95

MAC
#1924275

Intuit

QuickBooks For Mac

The Fastest and Easiest Way to Manage Your Entire Business!

- Speeds bill paying and invoicing
- Complete accounts receivable and payable
- Tracks checking accounts
- Easy inventory and purchase orders
- Complete payroll

$119.95

MAC
#1985894

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®

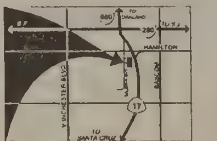
Fry's ELECTRONICS

Prices Good Through May 23, 1995

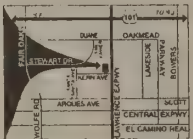
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

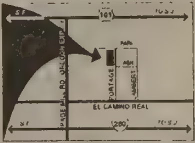
CORPORATE P.O. FAX #



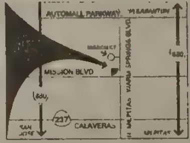
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595



Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950



Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044



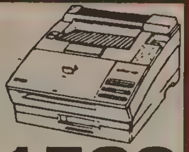
Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

DISCOVER NOVUS
VISA
MasterCard

Discover, VISA and MasterCard Accepted

EPSON®

WHEN YOU'VE GOT AN EPSON YOU'VE GOT A LOT OF COMPANY

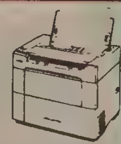


EPSON® Action Laser™ 1500

- Fast six pages per minute print speed.
- HP LaserJet III and Epson dot matrix compatible
- 27 resident fonts, 13 scalable
- 1MB memory expandable to 5MB
- 300 dpi resolution w/RIT
- Built-in parallel & serial interface
- 2-year limited warranty

$479

#1798706



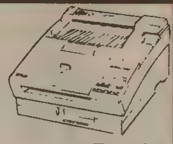
EPSON® Action Laser™ 1400

The Best Value In True 600 dpi Laser printing

- 600 dpi printing with Edge Smoothing Technology
- PCL 5e Compatible
- 2MB Memory with Image Compression Technology
- Printer Control Panel Software for Windows and DOS
- 45 Scalable Fonts, 10 TrueType Compatible

$599

#1984930



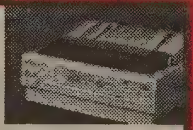
EPSON® Action Laser™ 1100

Advanced laser printing at a personal laser price.

- 300 dpi printing with Edge Smoothing Technology
- PCL 5® Compatible
- 1MB Memory with Image Compression Technology
- Toner Saving Mode
- Printer Control Panel Software for Windows™ and DOS
- 22 Fonts, 8Scalable

$397

#1986389

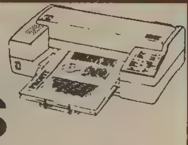


EPSON® LQ-570+ 24 PIN PRINTER WITH SCALABLE FONTS!

- 80 Column
- 269 CPS Draft Mode
- 112 CPS Letter Quality
- Four Scalable Fonts
- 360 dpi with Optional Film Ribbon

$248

#1612004



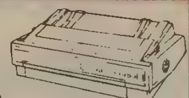
EPSON® Stylus 800 Plus

High Definition Inkjet Printing that Sets the Standard.

- Exclusive Epson Stylus Technology
- Improved grayscale graphics
- Your choice of fonts
- Windows™ compatible

$218

#1950214



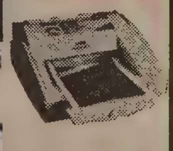
EPSON® LQ-1070 PLUS 24-PIN PRINTER

- 136 Column
- 269 CPS Draft
- 10 Fonts
- 2 Scalable Fonts
- 252 CPS Draft Mode
- 84 CPS NLQ Mode

$365

#1821927

DIGITAL PRINTERS

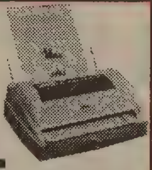


digital™ DECcolorwriter 550ic COLOR INKJET PRINTER

- High Performance color inkjet printer
- 400 cps performance, up to 5 pages per minute
- 600 x 300 dpi for text/300 x 300 dpi for color graphics
- DECcolor Works makes high quality color printing fast and easy
- Color correcting software delivers richer and truer on screen colors
- Color cartridge included
- Replaceable mono ink cartridge
- Handles letter, legal and international A4 sizes
- Ink low indicator
- Two year warranty

$328

#2012388

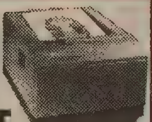


digital™ DECcolorwriter 120ic COLOR INKJET PRINTER

- Low-cost color thermal inkjet printer
- Print speed up to 3 pages per minute
- Built-in 70-page sheet feeder
- Laser quality at dot-matrix price
- MS Windows™ driver included
- 2-year warranty

$278

#1907261



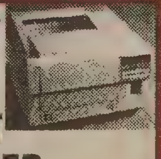
digital™ DECLaser 1152 POSTSCRIPT LEVEL 2 LASER PRINTER

- 300 X 300 dots per inch
- Printer speed up to to 4 pages per minute
- Paper Types: Cutsheet, labels, transparencies and envelopes
- 2MB memory upgradable to 4MB
- 17 Adobe PostScript fonts, upgradable to 43 fonts.
- Serial/Parallel AppleTalk interfaces

IBM & MAC READY!

$699

#1907227



digital™ DEClaser 5100 POSTSCRIPT LEVEL 2 LASER PRINTER

- 600 X 600 dots per inch
- Printer speed up to to 8 pages per minute
- Adobe Level 2 PostScript with 73 Adobe fonts
- 2MB memory upgradable to 66MB
- Serial, Parallel and AppleTalk interfaces
- Built-In 250-page sheet feeder

IBM & MAC READY!

$1139

#1907319

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

Fry's ELECTRONICS

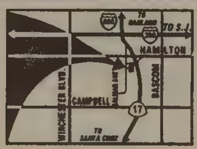
Prices Good Through May 23, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS

MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers



CAMPBELL
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595

AUTOMALL PARKWAY
PLEASANTON
MISSION CT.
MISSION BLVD.
CALAVERAS
MILPITAS
SAN JOSE

FREMONT
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

S.F.
101
TO S.J.
PARK
ASH
PORTAGE
EL CAMINO REAL
S.F.
TO S.J.

PALO ALTO
340 Portage Road
((415) 496-6000
(415)496-6044

TO S.F.
101
TO S.J.
DUANE
OAKMEAD
STEWART DR.
KERN AVE.
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE.
SCOTT
CENTRAL EXPWY
EL CAMINO REAL

SUNNYVALE
1177 Kern Ave.
(408) 773-1770
(408) 735-6950

DISCOVER NOVUS
VISA
MasterCard
ACCEPTED

DIGITAL DEALS

digital™

Starion 500i
PENTIUM 75MHz
MINI TOWER SYSTEM

• Integrated Windows™ graphic accelerator with 1MB VRAM • 8MB RAM, expandable to 128MB • 256KB L2 cache • 1.44 Floppy Drive • 1GB hard drive • Quad-speed CD-ROM • 14.4 Fax/Modem with answering machine and speakerphone • 16-bit stereo sound • Speakers • Microphone • Keyboard • Mouse • DOS • Windows™ for Workgroups • Business software

Monitor Sold Separately!

#2006758

$2199

Starion 700i
PENTIUM 90MHz
MINI TOWER SYSTEM

• Integrated Windows™ graphic accelerator with 1MB VRAM • 8MB RAM, expandable to 128MB • 256KB L2 cache • 1.44 Floppy Drive • 1GB hard drive • Quad-speed CD-ROM • 14.4 Fax/Modem with answering machine and speakerphone • 16-bit stereo sound • Speakers • Microphone • Keyboard • Mouse • DOS • Windows™ for Workgroups • Business software

Monitor Sold Separately!

#2006769

digital™

$2599

digital™

Starion 900i
PENTIUM 100MHz
MINI TOWER SYSTEM

• Integrated Windows™ graphic accelerator with 1MB VRAM • 8MB RAM, expandable to 128MB • 256KB L2 cache • 1.44 Floppy Drive • 1GB hard drive • Quad-speed CD-ROM • 14.4 Fax/Modem with answering machine and speakerphone • 16-bit stereo sound • Speakers • Microphone • Keyboard • Mouse • DOS • Windows™ for Workgroups • Business software

Monitor Sold Separately!

#2006770

$2899

FROM FRY'S!!!

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

Fry's ELECTRONICS

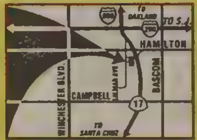
Prices Good Through May 23, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

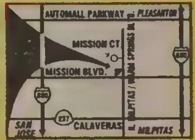
STORE HOURS

MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers


TO OAKLAND
TO S.J.
HAMILTON
WINCHESTER BLVD.
CAMPBELL
BASCOM
17
TO SANTA CRUZ

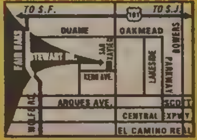
CAMPBELL
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595


AUTOMALL PARKWAY
PLEASANTON
MISSION CT.
MISSION BLVD.
MILPITAS / WARM SPRINGS BL.
SAN JOSE
237
CALAVERAS
MILPITAS

FREMONT
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

S.F.
101
TO S.J.
PARK
ASH
PORTAGE
LAMBERT
PAGE MILL RD.
EL CAMINO REAL
TO S.J.

PALO ALTO
340 Portage Road
((415) 496-6000
(415)496-6044

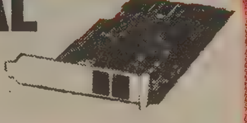

TO S.F.
101
TO S.J.
DUANE
OAKMEAD
FAIR OAKS
STEWART DR.
SAN XAVIER
KERN AVE.
LAKESIDE
PARKWAY
BOWERS
WOLFE RD.
ARQUES AVE.
SCOTT
CENTRAL EXPWY
EL CAMINO REAL

SUNNYVALE
1177 Kern Ave.
(408) 773-1770
(408) 735-6950

DISCOVER NOVUS
VISA
MasterCard
ACCEPTED

MODEMS

14,400 BPS INTERNAL DATA/FAX MODEM



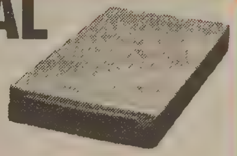
Data Compression ITU V.42 bis or MNP Class 5
- Error Correction ITU V.42 or MNP Class 2-4
- Saves long distance phone costs through faster transmissions
- Improves worker productivity w/faster data transfer and reliable connections
- Protects your investment with a 5 year warranty, backed by AT&T

#1751420

$\$89^{99}$

AT&T

14,400 BPS EXTERNAL DATA/FAX MODEM



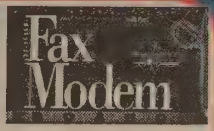
Data Compression ITU V.42 bis or MNP Class 5
- Error Correction ITU V.42 or MNP Class 2-4
- Saves long distance phone costs through faster transmissions
- Improves worker productivity w/faster data transfer and reliable connections
- Protects your investment with a 5 year warranty, backed by AT&T

#1751419

$\$109^{99}$

AT&T

14,400 BAUD INTERNAL FAX/MODEM

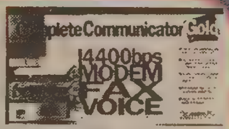


GROUP 3 Compatible • 16550 UART
BITCOM and BITFAX S/W • Supports up to Com 7 and IRQ-9
5 Year Warranty
#1930078

$\$59^{99}$

SIIG, Inc.

TheComplete PC Communicator Gold INTERNAL 14,400 BAUD FAX/MODEM w/VOICE MAIL


Complete Communicator Gold
14400bps
MODEM
FAX
VOICE

MNP5 and V.42 bis • Data throughput up to 57,600bps
- Group III Fax w/16550 UART
- 1000 password protected mailboxes

#1906422

$\$114^{99}$

SUPRA 144I PLUS EXPRESS 14,400 BPS INTERNAL FAX/MODEM

V.42,V.42bis, MNP 2-5 • 5-year limited warranty
Fax Talk, COMit,CIM Software
Includes hardware-based compression and error correction for greater efficiency.
#1964174

Supra Corporation

$76

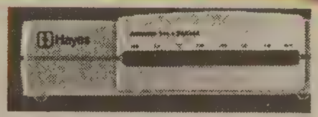
SUPRA 144I PLUS EXPRESS 14,400 BPS EXTERNAL FAX/MODEM

14,400 bps fax and data • Complete Windows package
Top-rated fax & data software • Easy-to-install, easy-to-use
5-year limited warranty
SupraExpress LED Display
#1997903

Supra Corporation

$94

Hayes ACCURA EXTERNAL 14,400 BPS FAX/MODEM



- Free SmartCom Data and Fax Software
- Group 3 Fax
- V.42, V.42bis, MNP 2-5
- Cables included

08-01174
#1798201

$\$129^{99}$

Hayes ACCURA INTERNAL 14,400 BAUD FAX/MODEM

Free SmartCom Data and Fax Software
Group 3 Fax
V.42, V.42bis, MNP 2-5
Cables included
08-01185
#1798197

$\$99^{99}$

BEST DATA ACE 14,400 BPS FAX/MODEM VOICE MAIL/SOUND

ACE
Fax
Modem
Voice
Sound
BEST DATA

THE ALL IN ONE BOARD FOR SOUND AND COMUNICATIONS
V.Fast Upgradable • 16-Bit Stereo • DSP Software Upgradable
#1871782

$\$169^{99}$

BEST DATA SMART ONE 14,400 BAUD INTERNAL FAX/MODEM

V.42bis • MNP Hardware
V.32bis • Class II
Throughput up to 57,600 bps
Quicklink II for DOS and Windows
#1871771

$\$49^{99}$

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

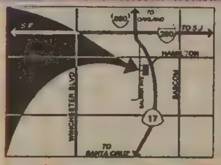
Fry's ELECTRONICS

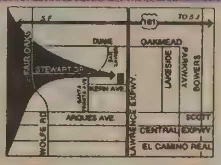
Prices Good Through May 23, 1995

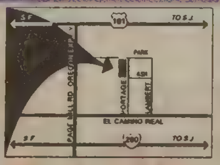
Limit Rights Reserved. Not Responsible for Typographical Errors.

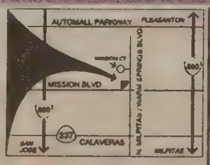
STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

CORPORATE P.O. FAX #


S F
880
TO OAKLAND
TO S J
280
HAMILTON
WINCHESTER BLVD
17
BASCOM
TO SANTA CRUZ


S F
101
TO S J
FAIR OAKS
DUNE
OAKMEAD
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
SCOTT
CENTRAL EXPWY
WOLFE RD
LAWRENCE EXPWY.
EL CAMINO REAL


S F
101
TO S J
PARK
PAGE MILL RD
OREGON EXP.
PORTAGE
LAMBERT
EL CAMINO REAL
280


AUTOMALL PARKWAY
PLEASANTON
MISSION BLVD
880
680
237
CALAVERAS
SAN JOSE
MILPITAS

Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

DISCOVER, VISA AND MasterCard ACCEPTED

MODEMS

PRACTICAL PERIPHERALS FaxMe

Introducing the plug-in cartridge that turns a HP LaserJet printer into a plain paper receive FAX machine.

FaxMe turns your HP printer into a receive only fax machine. It is compatible with all Group III fax machines and will receive at 9,600, 4,800, or 2400 BPS. FaxMe runs without software and without a computer.
Lifetime Warranty.
#1741771

$69

Prometheus™ EXTERNAL 14,400 BAUD FAX/MODEM

ProModem 144e

for Windows and DOS
Includes MaxFax Software from Prometheus
#1843660

$85.99

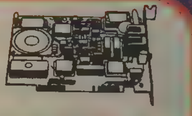
SIIG, Inc. 28,800 BAUD INTERNAL FAX/MODEM w/V.34 bis

- Class 1 and 2
- Supports up to Com 1-4 and IRQ-3,4,5
- 5 Year Warranty

#1991619

$139.99

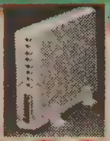
PRACTICAL PERIPHERALS 14,400 BAUD INTERNAL FAX/MODEM



14,400 Baud Modem/Fax
Super High Speed V.32 BIS Protocol
Quick Link II communication Software
#1667912

$98

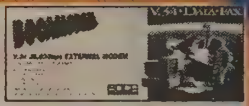
PRACTICAL PERIPHERALS 14,400 BAUD MINI TOWER FAX/MODEM EXTERNAL



V.32 and V.42 Bis
Quick Link II Communication Software
#1757781

$119.99

BOCAMODEM V.34 28,800 bps External Fax/Modem


BOCAMODEM
V.34 • DATA • FAX

New International Standard

- 28,800bps Data Modem
- 14,400bps Send/Receive Group 3 Fax
- V.42bis Data Compression for Troughput Up to 115,200bps
- High-Speed 16C550 UART Serial Card Included
- Backward Compatible with V.Fast Class (V.FC) and Lower Speed Modems
- Five Year Warranty

#1981878

$218

BOCAMODEM V.34 28,800 bps Internal Fax/Modem

BOCAMODEM
V.34 DATA FAX
BOCA

New International Standard

- 28,800bps Data Modem
- 14,400bps Send/Receive Group 3 Fax
- V.42bis Data Compression for Throughput Up to 115,200bps
- High-Speed 16C550 UART Serial Card on board
- Backward Compatible with V.Fast Class (V.FC) and Lower Speed Modems
- Five Year Warranty

#1981867

$189

BOCA SoundExpression 14.4VSp

SoundExpression 14.4VSp
BOCA

Transform your ordinary PC into a powerful multimedia/communications workstation

- 16-bit Multimedia Stereo Sound
- Voice Mail
- 14,400bps Send/Receive Fax/Data Modem
- Speakerphone
- Five Year Warranty

#1981889

$169.99

Telecoupler® II

High Speed Modem Coupler

CONNECTS A PORTABLE COMPUTER TO ANY TELEPHONE EASILY.

- Accoustic coupling with telephone handset
- Industry standard telephone to modem connector RJ-11
- Full or Half Duplex Communication Mode

#1847790

$109

CP+

14,400 BPS INTERNAL FAX/MODEM

V.42 bis, V.42 bis • Communication Software
#2010216

$49.99

14,400 BPS EXTERNAL FAX/MODEM

- V.32 bis, V.42 bis, MNP 2-5
- Windows and DOS Software

#1950982

$74.99

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

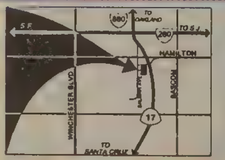
Fry's ELECTRONICS

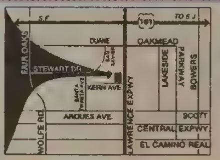
Prices Good Through May 23, 1995

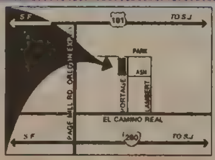
Limit Rights Reserved. Not Responsible for Typographical Errors.

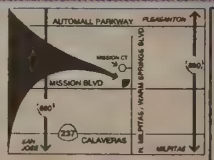
STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

CORPORATE P.O. FAX #


S.F.
880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ


S.F.
101
TO S.J.
DUANE
OAKMEAD
FAIR OAKS
STEWART DR.
KERN AVE
SANTA PAULITA AVE
LAWRENCE EXPWY
LAKESIDE
PARKWAY
BOWERS
WOLFE RD
ARQUES AVE.
SCOTT
CENTRAL EXPWY.
EL CAMINO REAL

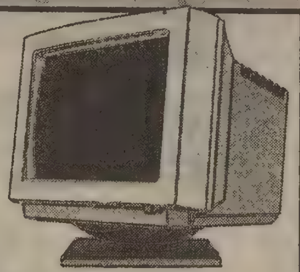

S.F.
101
TO S.J.
PAGE MILL RD. OREGON EXPWY
PARK
ASH
PORTAGE
LAMBERT
EL CAMINO REAL
S.F.
280
TO S.J.


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
880
880
237
CALAVERAS
SAN JOSE
N. MILPITAS / WARM SPRINGS BLVD
MILPITAS

Campbell	Sunnyvale	Palo Alto	Fremont
600 E. Hamilton Ave.	1177 Kern Ave.	340 Portage Road	440 Mission Ct.
(408) 364-3700	(408) 733-1770	(415) 496-6000	(510) 770-FRYS (3797)
(408) 364-3595	(408) 735-6950	(415) 496-6044	(510) 770-9423

DISCOVER, VISA AND MasterCard ACCEPTED

MONITORS



SONY.

CPD-15FS

1280 x 1024

15" SUPER VGA MONITOR

15" 1280 X 1024 Resolution • Flat Trinitron Screen
Energy Star Compliant
#1928095

$429

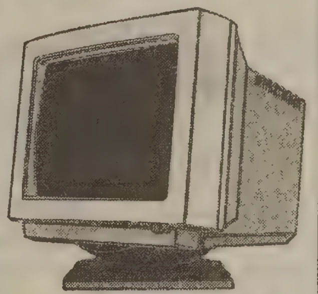
15" SUPER VGA MONITOR

NON-INTERLACED

1024 x 768

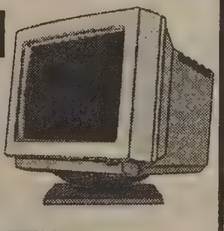
.28mm DOT PITCH

DIGITAL CONTROL



#1990401

$279



HITACHI

SuperScan™ 15s

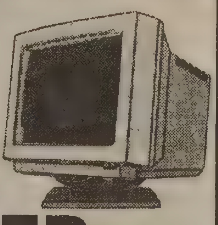
Non-Interlaced

1280 x 1024

15" SUPER VGA MONITOR

Non-Interlaced •28dpi • Flat Screen
#1939376

$395



NEC

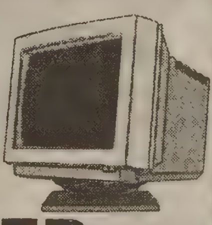
XP15

MULTISYNC

15" SUPER VGA MONITOR

.28 dot Pitch• 1024 x 768 - 76Hz • Flat OptiClear • Easy Access
MPR-II
#1960963

$669



NEC

XV15

MULTISYNC

15" SUPER VGA MONITOR

1280 x 1024 • Flat Screen • EPA Energy Star Compliant • VESA
#1988934

$429

HOME OF FAST, FRIENDLY,
COURTEOUS SERVICE!®

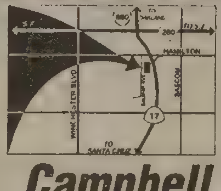
Fry's ELECTRONICS

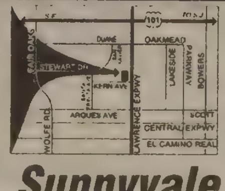
Prices Good Through
May 23, 1995

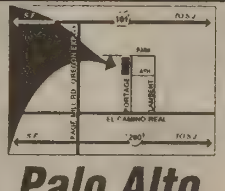
Limit Rights Reserved.
Not Responsible for
Typographical Errors.

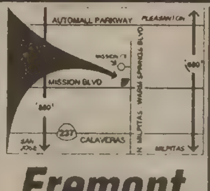
STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

CORPORATE P.O. FAX #


S.F.
880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ


S.F.
101
TO S.J.
DUANE
OAKMEAD
FAIR OAKS
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
WOLFE RD
ARQUES AVE
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL


S.F.
101
TO S.J.
PAGE MILL RD. OREGON EXPWY
PORTAGE
LAMBERT
EL CAMINO REAL
280


AUTOMALL PARKWAY
PLEASANTON
MISSION CT.
MISSION BLVD
WARM SPRINGS BLVD
680
880
237
CALAVERAS
SAN JOSE
MILPITAS

Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

DISCOVER NOVUS

VISA

MasterCard

DISCOVER,
VISA AND
MasterCard
ACCEPTED

HARD DRIVES FOR MAC!

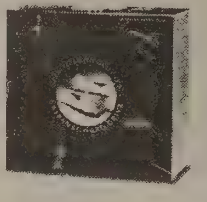
SPIRIT

270MB
EXTERNAL
HARD DRIVE FOR MAC

- 40 Watt Power Supply • DCR Active Termination
- Redline! Disk Utilities • Stackable
- Five Year Warranty

#2001890

$287



SPIRIT

365MB
EXTERNAL
HARD DRIVE FOR MAC

- 40 Watt Power Supply • DCR Active Termination
- Redline! Disk Utilities • Stackable
- Five Year Warranty

#2001904

$307

SPIRIT

540MB
EXTERNAL
HARD DRIVE FOR MAC

- 40 Watt Power Supply • DCR Active Termination
- Redline! Disk Utilities • Stackable
- Five Year Warranty

#2001915

$357

SPIRIT

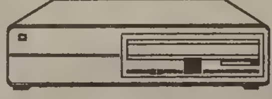
730MB
EXTERNAL
HARD DRIVE FOR MAC

- 40 Watt Power Supply • DCR Active Termination
- Redline! Disk Utilities • Stackable
- Five Year Warranty

#2001926

$407

MITAC



270MB
Syquest
Removable Hard Disk
Ideal for Back-ups!

- Cables, terminator, and formation software included
- 3.5", 270MB cartridge included!

#1979013

$527

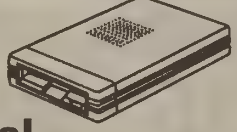
IOMEGA®

100MB
SCSI
ZIP DRIVE SOLUTION
FOR MACINTOSH®

#2007841

$199

FUJITSU



230MB
Magneto-Optical
Rewriteable Disk Drive
for Macintosh®

- 230MB total formatted capacity
- Average Seek Time: 30ms typ • SCSI 2 Interface
- 50 pin DB centronics (input) • One Inch Height

#1937879

$697

maxell

44MB Removeable
Pre-Formatted
Cartridge for
Macintosh®

100% Syquest Compatible • Five Year Warranty
RC-44 #1997800

$39

maxell

88MB Removeable
Pre-Formatted
Cartridge for
Macintosh®

100% Syquest Compatible • Five Year Warranty RC-88
#1997811

$47

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

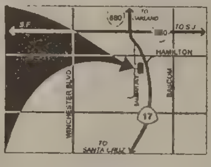
Fry's ELECTRONICS

Prices Good Through
May 23, 1995

Limit Rights Reserved.
Not Responsible for
Typographical Errors.

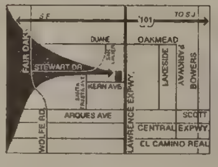
STORE HOURS
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm

CORPORATE P.O. FAX #


S.F.
880
TO OAKLAND
280
TO S J
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

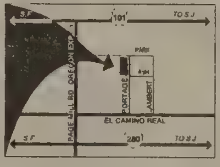
Campbell

600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595


S F
101
TO S J
FAIR OAKS
DUANE
OAKMEAD
STEWART DR.
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
WOLFE RD.
LAWRENCE EXPWY.
SCOTT
CENTRAL EXPWY.
EL CAMINO REAL

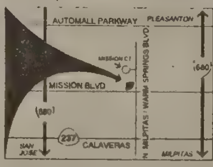
Sunnyvale

1177 Kern Ave.
(408) 733-1770
(408) 735-6950


S.F.
101
TO S J
PAGE MILL RD
OREGON EXP.
PORTAGE
LAMBERT
EL CAMINO REAL
S F
280
TO S J

Palo Alto

340 Portage Road
(415) 496-6000
(415) 496-6044


AUTOMALL PARKWAY
PLEASANTON
MISSION CT.
680
MISSION BLVD
880
237
CALAVERAS
SAN JOSE
N. MILPITAS / WARM SPRINGS BLVD.
MILPITAS

Fremont

440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

MASTERCARD, VISA AND DISCOVER ACCEPTED

DISCOVER NOVUS
VISA
MasterCard

SCSI HARD DRIVES

Quantum™

540MB SCSI HARD DRIVE

1" ht. • 14ms Access
300,000MTBF
2 Year Warranty • 128K Cache
#1899029

$209

CONNER

170MB SCSI HARD DRIVE

3.5" X 1" HT.
14msec
CFA—170S
#1986482

$99.95

Quantum™

730MB SCSI HARD DRIVE

- 12MSec Access Time
- 1" ht

QM30730LT-S
#1983582

$259

CONNER

1.08 GIGABYTE SCSI-II HARD DRIVE

3.5" X 1" HT.
11msec
CFP1080S
#2003917

$449

Quantum™

2.1 GIGABYTE SCSI-II HARD DRIVE

Empire 2100s
#1928110

$897

Seagate

1.05 GIGABYTE SCSI HARD DRIVE

- 9msec Access Time
- 1/2 ht.
- 256K Cache
- 5 Year Warranty

ST11200N/312OON
#1836338

$509

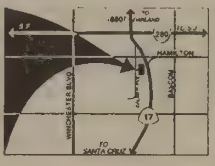
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

Fry's ELECTRONICS

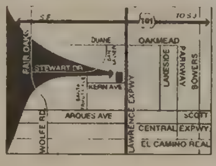
Prices Good Through May 23, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm


SF
880/ TO OAKLAND
280
TO SJ
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

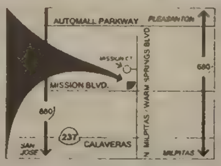
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595


SF
101
TO SJ
DUANE
OAKMEAD
FAIR OAKS
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
LAWRENCE EXPWY
WOLFE RD
ARQUES AVE
SCOTT
CENTRAL EXPWY
EL CAMINO REAL

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950

SF
101
TO SJ
PARK
PORTAGE
AMBCAT
PAGE MILL RD. OREGON EXPWY
EL CAMINO REAL
SF
280
TO SJ

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD.
MILPITAS - WARM SPRINGS BLVD
680
880
237
CALAVERAS
SAN JOSE
MILPITAS

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

CORPORATE P.O. FAX #

MASTERCARD, VISA AND DISCOVER ACCEPTED

DISCOVER NOVUS
VISA
MasterCard

HARD DRIVES

560MB IDE HARD DRIVE

3.5" x 1" ht. 12MSec Access
256K Buffer
#1949933

$175

Maxtor

850MB ENHANCED IDE HARD DRIVE

3.5" x 1" Ht. • 12 msec Access Time
7850AV
#1988521

$239

Seagate

1.08 GIGABYTE ENHANCED IDE HARD DRIVE

3.5" X 1" ht. • 12msec Access • 256K Buffer • Fast ATA
ST-31220A
#1990799

$379

WESTERN DIGITAL

850MB ENHANCED IDE HARD DRIVE

Fast Enhanced IDE • 10msec Access
3.5" x 1" ht.
WD-AC2850
#1988510

$269

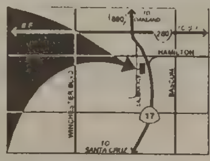
Fry's ELECTRONICS

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

Prices Good Through May 23, 1995

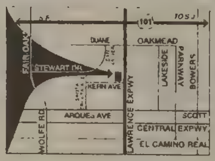
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm


S F
880
TO OAKLAND
280
TO S J
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

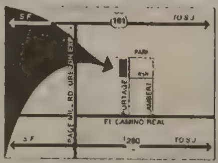
Campbell

600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595


S F
101
TO S J
FAIR OAKS
DUANE
OAKMEAD
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
WOLFE RD
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL

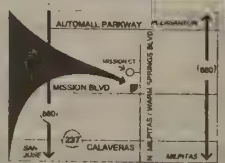
Sunnyvale

1177 Kern Ave.
(408) 733-1770
(408) 735-6950


S F
101
TO S J
PAGE MILL RD
PARK
PORTAGE
ASH
LAMBERT
EL CAMINO REAL
S F
280
TO S J

Palo Alto

340 Portage Road
(415) 496-6000
(415) 496-6044


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
880
MISSION BLVD
N MILPITAS / WARM SPRINGS BLVD
880
237
CALAVERAS
SAN JOSE
MILPITAS

Fremont

440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

CORPORATE P.O. FAX #

MASTERCARD, VISA AND DISCOVER ACCEPTED

DISCOVER NOVUS
VISA
MasterCard

HARD DRIVES

Maxtor

420MB IDE HARD DRIVE

3.5" x 1" Ht.
12 msec Access Time
256K Buffer
7420AV
#1972979

$164

420MB IDE HARD DRIVE

3.5" x 1" ht.
#1920787

$154

CONNER

420MB 3.5" IDE HARD DRIVE

14ms Fast Access • 3.5" X 1" • 32K Buffer
IDE Interface
#1886218

$169

IBM

728MB ENHANCED IDE HARD DRIVE

- 12msec Access
- Enhanced IDE
- 3.5" x 1" Ht.

#1983870

$265

CONNER

540MB IDE HARD DRIVE

3.5" X 1"HT. • 12msec Access
CFA540A
#1802210

$179

CONNER

850MB IDE HARD DRIVE

• 1" x 3.5" Size • 12MSec Access
• 256K Buffer
CFA850A
#1981513

$244

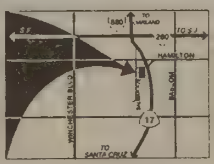
Fry's ELECTRONICS

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

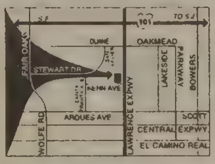
Prices Good Through
May 23, 1995

Limit Rights Reserved.
Not Responsible for
Typographical Errors.

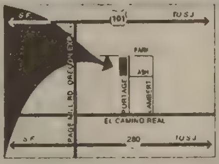
STORE HOURS
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm



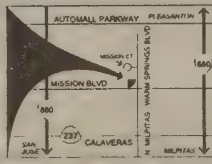
S.F.
880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ



S.F.
101
TO S.J.
DUANE
OAKMEAD
FAIR OAKS
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
SCOTT
WOLFE RD
LAWRENCE EXPWY
CENTRAL EXPWY
EL CAMINO REAL



S.F.
101
TO S.J.
OREGON EXP
PAGE MILL RD
PARK
ASH
PORTAGE
LAMBERT
EL CAMINO REAL
280



AUTOMALL PARKWAY
PLEASANTON
MISSION CT
680
MISSION BLVD
WARM SPRINGS BLVD
880
237
CALAVERAS
SAN JOSE
N MILPITAS
MILPITAS

Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044

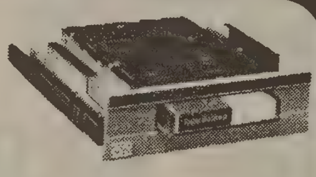
Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

CORPORATE P.O. FAX #

MASTERCARD, VISA AND DISCOVER ACCEPTED

YOUR BEST STORAGE TAPE BUYS ARE ALWAYS AT FRY'S!!

COLORADO MEMORY SYSTEMS INC.



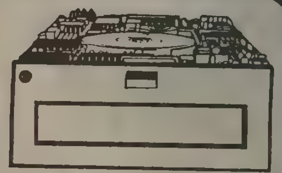
250MB TAPE BACK-UP

40/80/120/250 MB Format
Internal Drive runs off floppy controller
Uses DC-2120 Tapes

$137

Model DJ-20
#1610068

EXABYTE 1.3 GIGABYTE INTERNAL TAPE BACK-UP FOR PC



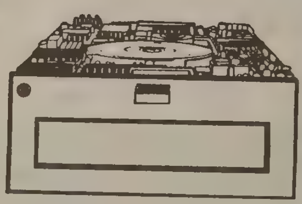
- Up to 1.3 Gigabyte internal tape back-up
- Includes one tape cartridge
- DOS/Windows

NU DESIGN

$369

ND-71000
#1990917

CONNER 420MB INTERNAL TAPE DRIVE

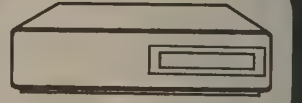


- Plugs to floppy controller
- Includes 420MB tape cartridge

$169

#1975019

CONNER TAPE•STOR 250MB EXTERNAL PARALLEL PORT TAPE BACK-UP



Up To 250MB Back-up, External Plugs Into Parallel Port.

$249

#1948851

Fry's ELECTRONICS

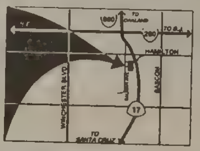
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®

Prices Good Through May 23, 1995

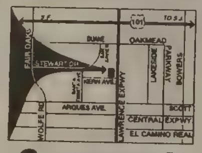
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

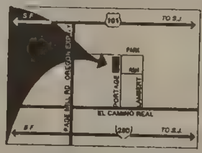
CORPORATE P.O. FAX #


880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

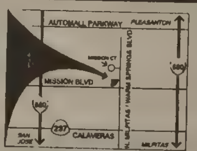
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595


S.F.
101
TO S.J.
FAIR OAKS
DUANE
OAKMEAD
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
SCOTT
CENTRAL EXPWY
WOLFE RD
LAWRENCE EXPWY
EL CAMINO REAL

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950


S F
101
TO S.J.
OREGON EXPWY
PAGE MILL RD
PARK
PORTAGE
LAMBERT
EL CAMINO REAL
280

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
680
880
SAN JOSE
237
CALAVERAS
MILPITAS

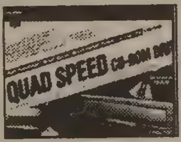
Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

DISCOVER NOVUS
VISA
MasterCard

Discover, VISA and MasterCard Accepted

STORAGE CD-ROM AND SPEAKERS

QUAD-SPEED CD-ROM KIT

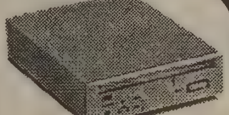

QUAD SPEED CD-ROM DRIVE

- Teac Internal Quad-Speed drive with controller card
- 195ms access time and 600 KB/sec.
- Data and Audio Cable included
- 50 exciting shareware titles
- Meets MPC2, XA, and multisession Photo CD specifications
- Two-year warranty
- Free technical support
- Easy to install and use

#1998362

$\$199^{99}$

PLEXTOR
Formerly Texel

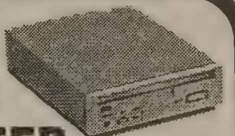


INTERNAL QUAD-SPEED CD-ROM

SCSI CD-ROM
150ms Access
600KB/sec Transfer Rate
1MB Buffer
2 Year Warranty
TXL-PX-43CH
#1934957

$\$369$

TOSHIBA



INTERNAL QUAD-SPEED SCSI-II CD-ROM

- 120 MSec Seek Time
- 150MS Access Time
- 600KB Transfer Rate

3501
#1962839

$\$272$

Sun Moon Star

INTERNAL CD-ROM DRIVE

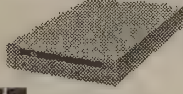
SONY CDU-55E with Controller Card

- 250 ms access time
- 256 KB cache memory
- 300KB per second Data Transfer Rate
- Multi session Kodak Photo CD

CDU-55E
#1981683

$\$137$

INTERNAL QUAD-SPEED CD-ROM DRIVE



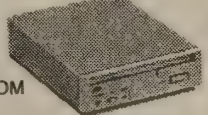
- 250MS Access, 600KB Data Transfer Rate, Multisession Photo CD Ready
- High-speed IDE (Atapi) interface card
- Cables, mounting hardware and utility software
- Installation video CD-ROM TITLE
- New Grolier's Encyclopedia

#2002293

$\$199^{99}$

REVEAL
COMPUTER PRODUCTS

DOUBLE-SPEED CD-ROM



- Sanyo Double-speed CD-ROM
- 250 ms Access Time
- 300 KB/S Transfer Rate
- With interface card

#1964853

10 SOFTWARE TITLES

$\$129^{99}$

RENO

Portable CD-ROM PLAYER

INCLUDES 16-BIT SCSI-2 PCMCIA PC ADAPTER

- Powerful: 180ms Double-speed CD-ROM Disc Player
- Portable: Works with AC adapter or batteries
- Includes stereo headphones, carrying case, AC adapter and cables
- Kodak Photo CD multi-session ready
- Stereo headphones
- Includes Corel® SCSI version 2 software
- Model MV-500

#2012779

$\$418$

MEDIA VISION

YAMAHA

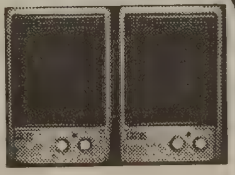
POWERED MONITOR SPEAKERS

Unbelievable sound and music reproduction in speakers smaller than two cowboy boots- with 10 watts per channel output, 80Hz deep bass response, full volume and presence control, pure spruce wood cones, and Yamaha's exclusive Active Servo Technology!

YST-M10H
#1972201

$\$79$

Labtec



SHIELDED COMPUTER SPEAKERS

- 3" Micro Stereo Speakers
- Shielded, Amplified
- Individual Volume Controls
- 3.6 Watts x 2
- 3.5mm Stereo Plug

CD-1
#1945331

$\$11^{99}$

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®

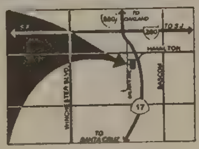
Fry's ELECTRONICS

Prices Good Through
May 23, 1995

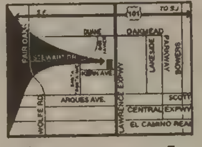
Limit Rights Reserved.
Not Responsible for
Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

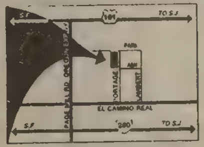
CORPORATE P.O. FAX #


S.F.
TO OAKLAND
880
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

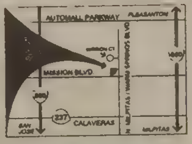
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595


S.F.
101
TO S.J.
FAIR OAKS
DUANE
OAKMEAD
LAKESIDE
PARKWAY
BOWERS
KERN AVE
ARQUES AVE.
WOLFE RD.
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950


S.F.
101
TO S.J.
PARK
PORTAGE
ASH
LAMBERT
EL CAMINO REAL
280

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
680
237
CALAVERAS
SAN JOSE
MILPITAS

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

Discover, VISA and MasterCard Accepted

DYSAN™ STORAGE MEDIA

SAVE THE THINGS THAT MATTER MOST™

DYSAN™
SAVE THE THINGS THAT MATTER MOST™

3.5" DS/HD IBM FORMATTED DISKETTES

Plastic Disk Box Included
All Packaging Made With Recycled Materials
Box Of Ten
#1729049

$4.99*

**After $2 Mail-in Rebate. In-store Cost $6.99*

DYSAN™
SAVE THE THINGS THAT MATTER MOST™

3.5" DS/HD MAC FORMATTED DISKETTES

Plastic Disk Box Included
All Packaging Made With Recycled Materials
Box Of Ten
#1729083

$4.99*

**After $2 Mail-in Rebate. In-store Cost $6.99*

DYSAN™
SAVE THE THINGS THAT MATTER MOST™

3.5" DS/DD IBM FORMATTED DISKETTES

Plastic Disk Box Included
All Packaging Made With Recycled Materials
Box Of Ten
#1729027

$3.99*

**After $2 Mail-in Rebate. In-store Cost $5.99*

DYSAN™
SAVE THE THINGS THAT MATTER MOST™

5.25" DS/HD IBM FORMATTED DISKETTES

Plastic Disk Box Included
All Packaging Made With Recycled Materials
Box Of Ten
#1729005

$3.99*

**After $2 Mail-in Rebate. In-store Cost $5.99*

DYSAN™
SAVE THE THINGS THAT MATTER MOST™

DY2120 120MB DATA CARTRIDGE

- 1/4" Tape
- Unformatted

#1781496

$10.99

DYSAN™
SAVE THE THINGS THAT MATTER MOST™

DY2120 120MB DATA CARTRIDGE

- QIC-80
- Formatted

#1783443

$12.99

DYSAN™
SAVE THE THINGS THAT MATTER MOST™

DY6250 250MB DATA CARTRIDGE

- Unformatted

#1781500

$16.99

DYSAN™
SAVE THE THINGS THAT MATTER MOST™

DY600A 60MB DATA CARTRIDGE

- 1/4" Tape • Unformatted
- Dual Belted, Lifetime Warranty

#1786619

$12.99

DYSAN™
SAVE THE THINGS THAT MATTER MOST™

DY6150 150MB DATA CARTRIDGE

- 1/4" Tape • Unformatted
- Dual Belted, Lifetime Warranty

#1786620

$13.99

DYSAN™
SAVE THE THINGS THAT MATTER MOST™

DY2000 40MB DATA CARTRIDGE

- 1/4" Tape
- Unformatted

#1786631

$8.99

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

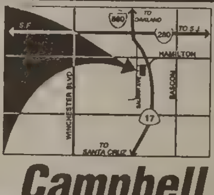
Fry's ELECTRONICS

Prices Good Through May 23, 1995

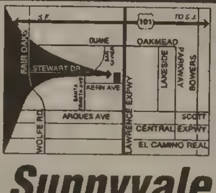
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

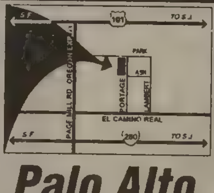
CORPORATE P.O. FAX #


S.F
880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

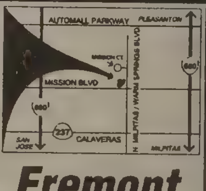
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595


S.F.
101
TO S.J.
FAIR OAKS
DUANE
OAKMEAD
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL
WOLFE RD

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950


S.F
101
TO S.J
PARK
ASH
PAGE MILL RD
OREGON EXPWY
PORTAGE
LAMBERT
EL CAMINO REAL
S.F
280
TO S.J

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
N MILPITAS / WARM SPRINGS BLVD
680
880
237
CALAVERAS
SAN JOSE
MILPITAS

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

DISCOVER, VISA AND MasterCard ACCEPTED

MULTIMEDIA

TeleVideo
MULTIMEDIA

TeleSound Pro 16

FREE
tele Sound
PRO 16
TeleVideo
MULTIMEDIA

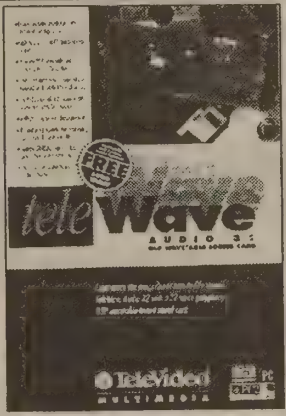
- True 16-bit CD-quality stereo sound FM sound board.
- Full compatibility with all major sound standards including Sound Blaster, MPU 401, KMT-32 and Windows Sound Systems.
- 8 and 16 digital recording and playback from4kHz to 44.1kHz sample rate.
- Built-in CD-ROM interface supports Sony, Mitsumi, Panasonic and IDE.
- EasyStart installation.

$79 99

#1982053

TeleVideo
MULTIMEDIA

TeleWave Audio 32


FREE
tele Wave
AUDIO 32
TeleVideo
MULTIMEDIA

- DSP based wave table and FM synthesis combo sound board.
- 32 simultaneous stereo voice polyphony and General MIDI standard support with 128 instruments
- 2MB of CD-quality sampled instruments sounds stored on ROM
- Full Compatibility with all major sound standards including Sound Blaster, MPU 401, MT-32 and Windows Sound Systems.
- Built-in CD-ROM interface supports Sony, Mitsumi, Panasonic and IDE.
- Easy start installation.

#1982042

$179 99

#1982042

Prometheus

WAVETABLE SOUND CARD

16-Bit Stereo Sound
32 Operator Wavetable Synthesizer

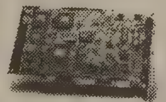
Advanced wavetable synthesis uses real instrument samples. It has the Digital Signal Processor (DSP). Features include Sound Blaster emulation, 16-bit stereo sound, 44.1kHZ record and playback, general MIDI compliant and a joystick port. It is upgradable to speech recognition game.

$129 99

#1972083

CREATIVE
CREATIVE LABS, INC.

SOUND BLASTER 16 VALUE

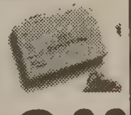


- 8 and 16-bit stereo sampling/playback from 4-44.1 KHz
- Real-time, 16-bit software compression and decompression of sound files
- CD-ROM interface for Creative Labs CD-ROM drives
- Bundled Software: Monologue for Windows and several Creative Labs software utilities
- Windows 3.1, OS/2 and MPC2 compatible

$94 99

#1901818

Pro PC/TV Plus
Portable PC-to-TV Encoder



- External VGA-to NTSC converter (VGA to TV/videotape) for your laptop or desktop PC
- Drives both VGA and TV simultaneously
- S-Video (SVHS) output for high quality video recordings/displays
- Anti-flicker circuit for sharp Windows display

AITech

$189 99

#1821433

MultiPro CTV
External VGA-to-video/TV encoder for your PC or MACINTOSH

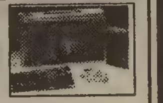
- Record,edit or playback audio and video from your PC or Macintosh video output.
- Easy to use and easy to install-just plug and paly
- Supports up to 16.7 million (24-bit) colors with standard VGA (640x480) resolution.
- Dual display support cability (VGA monitor and TV/VCR simultaneously).

$279 99

#1906835

STUDIO MAGIC

Personal Video Studio



PC Video Production Studio with built-in sound, video & computer graphics sequencer.

- Video Overlay/Titler
- Auto Production
- VGA/NTSC Preview Windows
- Transitions
- Chroma/Luma Special Effects

$399 99

#1936122

MICRO DCI
Desktop Video Editing System for Windows

The video solution for real-time capturing, editing and playback of video. Includes Adobe Premiere for Windows.

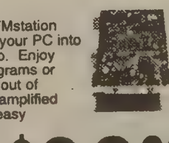
- Capture digital VHS video to your hard disk
- Add transitions, titles and special effects
- Print to tape in full-size NTSC or PAL with S-VHS quality
- Now with crystal flying fonts pro

$698

PN-012014
#2000349

REVEAL

PC RADIO CARD



Tune to your favorite FMstation while you work! Turns your PC into a full featured FM radio. Enjoy your favorite radio programs or news broadcasts right out of your PC, with this pre-amplified stereo FM card. The easy installation takes minutes. It has advanced features such as fine tune, auto scan, and a programmable 10 station memory.

$39 99

#1985816

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®

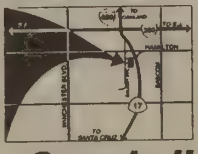
Fry's ELECTRONICS

Prices Good Through May 23, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

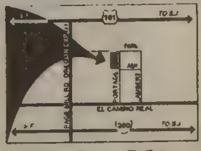
CORPORATE P.O. FAX #


880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

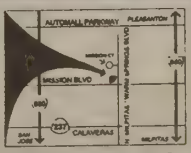
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595

101
TO S.J.
DUANE
OAKMEAD
FAIR OAKS
LAKESIDE
FAIRWAY
BOWERS
KERN AVE
ARQUES AVE.
WOLFE RD
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950


101
TO S.J.
PORTAGE
EL CAMINO REAL
280
TO S.J.

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
680
880
237
CALAVERAS
SAN JOSE
MILPITAS

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

Discover, VISA and MasterCard Accepted

MULTIMEDIA

Sun Moon Star 16-BIT MULTIMEDIA UPGRADE KIT

16 BIT MULTIMEDIA
UPGRADE KIT
Sun Moon Star

includes:
- **Sony double-speed CD-ROM Drive CDU-55E**
- True 16-Bit Stereo Sound Board, with Sony IDE Interface
- Action 100 (includes 100 shareware games)
- Mini Speakers
- Easy installation software
- Audio cables and users' manual

$179

#1981719

DELUXE MULTIMEDIA KIT

MEDIA VISION
MULTIMEDIA KIT

- Double-Speed Sanyo CD-ROM Drive with a 250ms acess time
- 16-Bit sound card
- Speakers
- Improved ease of installation
- 4 CD-ROM software titles

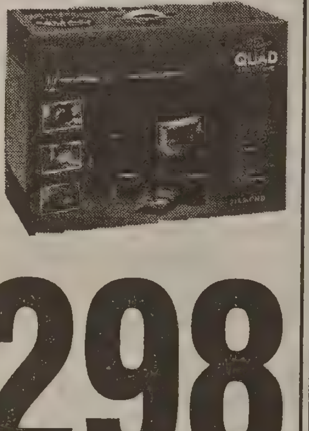
FREE INSTALLATION

$198

#1957554

MEDIA VISION

Multimedia Kit 4000



- Quad-Speed CD-ROM Drive w/600kb/s Transfer and 200ms Access
- 16-Bit Stereo Diamond Sound Card
- High Performance Magnetically Shielded Speakers
- 11 Software Titles

$298

DIAMOND MULTIMEDIA

#1980006

MULTIMEDIA KIT

8+50
4X
MULTIMEDIA KIT

- High Performance Quad-Speed CD-ROM Drive
- 16-Bit Stereo Sound Card
- 8 Hot Multimedia Titles Plus Bonus CD-ROM with 50 Popular SharewareGames
- Stereo Speakers
- Media Vision Easy Installation Kit
  - -Installation Video and Tools
  - -Award-winning Documention

FREE INSTALLATION

$288

MV-2200
#1998281

MEDIA VISION

Quad-Speed Multimedia Kit

- Quad-speed CD-ROM drive
- 16-Bit, CD-quality stereo sound card, wavetable synthesizer upgradeable
- 50 exciting shareware titles on CD
- Premium stereo speakers, microphone & headphones
- Compton's Interactive Encyclopedia
- Installation Video
- 100% sound blaster compatible guaranteed
- FREE technical support
- 2-year warranty

$279

Value Media 800
#1998339

CREATIVE Digital School House Kit

CREATIVE LABS, INC.

- SB 16 Value Sound Card
- Double-Speed Internal CD-ROM
- 14 Educational Software Titles

$269

#1966774

Multimedia Value Kit

MULTIMEDIA VALUE KIT

- **SANYO Double-Speed CD-ROM**
- 16-bit stereo sound card
- Magnetically shielded stereo speakers
- High quality microphone and light weight headphones
- 20 Software titles

$189

#1964842

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®

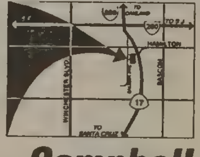
Fry's ELECTRONICS

Prices Good Through May 23, 1995

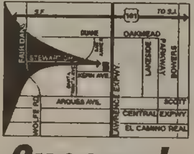
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

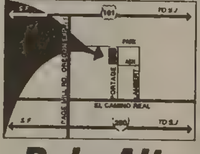
CORPORATE P.O. FAX #


280
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595


101
TO S.J.
OAKMEAD
LAKESIDE
BOWERS
KERN AVE.
ARQUES AVE.
WOLFE RD.
LAWRENCE EXPWY.
CENTRAL EXPWY
SCOTT
EL CAMINO REAL

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950


101
TO S.J.
PORTAGE
EL CAMINO REAL
280

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044

AUTOMALL PARKWAY
PLEASANTON
MISSION BLVD
680
880
237
CALAVERAS
SAN JOSE
MILPITAS

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

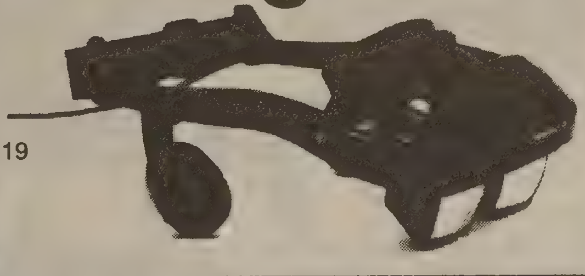
DISCOVER NOVUS
VISA
MasterCard

Discover, VISA and MasterCard Accepted

ACCESSORIES!

THE FIRST VIRTUAL REALITY PRODUCT FOR THE HOME!

i-glasses!



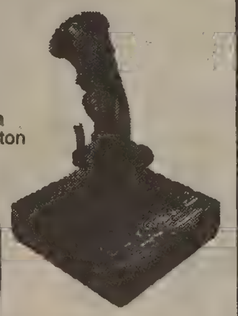
This exciting head-mounted display features 3-D and look around capability. Experience games like never before, or use it for watching TV. It's like having a personal 80" screen.

VIRTUAL i-O™

PC Version #2009108
$799

Video Version #2009119
$599

THRUSTMASTER F16-FLCS



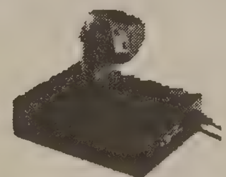
Fully programmable stick with four 4-way switches, four buttons, and a two stage trigger! If that isn't enough for you, hold down the pinkie button and you double the functions!

- 4 four-way switches • F16 Style Joystick
- Ability to work to operate as a two-button joystick in all games
- Includes Thrustware Software
- HOTAS™ Flight

#1969995

$129

THRUSTMASTER MARK II WEAPONS CONTROL SYSTEM



- User-programmable throttle and weapons functions
- Fully compatible with any current or future game
- Allows joystick programmability through joystick interface
- One year warranty
- For use with IBM and compatible PCs

#1853870

$109

THRUSTMASTER FLIGHT CONTROL SYSTEM

Replica of the F-4 flightstick
Multi-function
IBM Compatible
#1852581

$69

WingMan™ Extreme *Joystick*

Use It Or Die!

- Four-way view switch
- Rubber-encased buttons for sure-fire accuracy
- Quick action trigger • Sculpted grip perfectly fits your hand
- Heavy, stable base for serious flying
- Seven-foot cable easily reaches your computer
- One year warranty
- IBM or compatible system

#1987782

LOGITECH

$45⁹⁹

WingMan™ *Joystick*

Fly it Meaner, Harder, Faster

- Rubber encased buttons improve firing accuracy
- Molded grip perfectly fits your hand
- Solid construction and heavy stable base
- Throttle control for better performance
- Seven-foot cable easily reaches your computer
- One year warranty
- IBM or compatible system

#1987771

LOGITECH

$25 99

Dexxa Joystick

Advanced features at an affordable price make Dexxa Joystick your best gaming value.

- Additional button for missiles, bombs, and other weapons control
- The autofire feature can be set for continuous fire power
- Trim adjust feature resets the cursor to the center of your screen.

#1937927

LOGITECH

$16 99

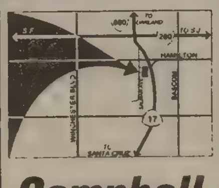
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

Fry's ELECTRONICS

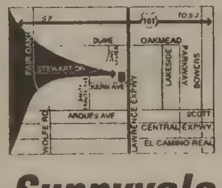
Prices Good Through May 23, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

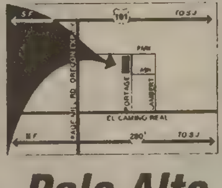
STORE HOURS
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm



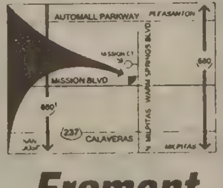
S F
880
TO OAKLAND
280
TO S J
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ



S F
101
TO S J
DUANE
OAKMEAD
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
SCOTT
CENTRAL EXPWY
EL CAMINO REAL
WOLFE RD
FAIR OAKS
LAWRENCE EXPWY



S F
101
TO S J
PAGE MILL RD
OREGON EXPY
PORTAGE
LAMBERT
EL CAMINO REAL
280
TO S J



AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
WARM SPRINGS BLVD
680
880
237
CALAVERAS
MILPITAS
SAN JOSE

Campbell
600 E. Hamilton Ave.
(408) 364-3700
CORPORATE P.O. FAX # **(408) 364-3595**

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950

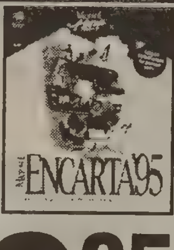
Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

MASTERCARD, VISA AND DISCOVER ACCEPTED

YOUR BEST CD-ROM SOFTWARE BUYS ARE ALWAYS AT FRY'S!

Microsoft® ENCARTA™ '95



The Complete Interactive Multimedia Encyclopedia

Great features make it easy to use.

- Quick reference • Find wizard
- On screen navigation tips
- 26000 fully updated articles
- 8 hours of sound
- 7000 photos
- 100 animations/video clips.

$\$79^{95}$

IBM CD-ROM
#1966785

Broderbund MYST PC CD-ROM

Myst is an adventure game unlike any other, with stunning 3-D photo realistic worlds. Myst is a surrealistic exploration, where every vibrant rock, scrap of paper and sound may hold vital clues to your unraveling a chilling tale of intrigue and deceit.

$\$42^{95}$

IBM CD-ROM
#1893399

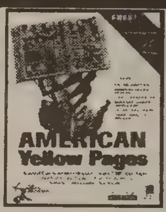
STAR WARS Dark Forces CD-ROM

Join the Rebel Alliance's Covert Operations Division, infiltrate the Empire, then battle every man and machine the Imperial Forces can muster. May the Force be with you.

$\$49^{95}$

IBM CD-ROM
#1973431

AMERICAN YELLOW PAGES



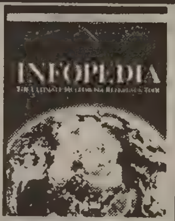
The Most Complete Mailing, Marketing and Telephone Information Available on CD-ROM. Features Include:

- Includes virtually every U.S. Business-over 10 Million
- Compiled from 5,000 Yellow Page Directories and hundreds of other information sources
- Verified by 14 million phone calls
- Choose from more than 7,000 categories/SIC Codes

$\$84^{95}$

IBM CD-ROM
#2000811

INFOPEDIA CD-ROM for Windows™ The Ultimate Multimedia Reference Tool



This powerful multimedia resource makes learning fun, with eight different reference works, including a 29-volume encyclopedia, over 200,000 entries, full-motion videos, dazzling 3-D animations, thousands of images, recordings and narrations. INFOPEDIA encourages you to discover the sights, sounds and thoughts of the world.

$\$49^{95}$

IBM CD-ROM
#1984365

Microsoft® CINEMANIA 1995 WINDOWS

is your personal guide to the world's films - complete with reviews, biographies, video and audio clips, and cinema insights. Nearly 20,000 movies, and 4000 biographies of stars are covered in detail.

$\$59^{95}$

IBM CD-ROM
#1960158

RISE OF THE ROBOTS CD-ROM

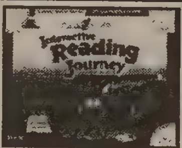
Is the first title in a new generation of computer games conceived to combine state-of-the-art excellence in programming design and graphics display. Features:

- One and two player models
- 3-D visual contouring allows robots to exist in a realistic environment
- Up to 100 frames of animation support fluid robot movement

$\$49^{95}$

IBM CD-ROM
#1973486

The Learning Company Reader Rabbit's Reading Journey Windows



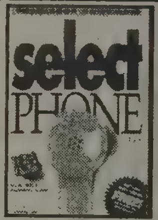
Combines interactive technology with a proven reading curriculum to deliver a software program that allows children to become successful readers. Includes:

- 40 simple reading books
- over 100 playful phonics activities
- 40 printed storybooks

$\$79^{95}$

IBM CD-ROM
#1970221

PROPHONE SELECT PHONE

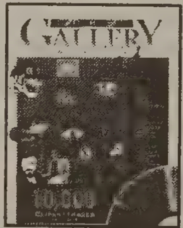


Select Phone offers more than any other phonebook on CD-ROM. Eighty million residential and business white page listings that let you look up by any field: Name, address, telephone number, business heading, or SIC code. It's the only phonebook on CD-ROM that maps listings. The only one to offer free unlimited downloading of listings to your database. The only one to include a FREE update certificate for the next edition so your listings will stay more current than any other phonebook you can buy today.

$\$149^{95}$

PC/MAC
CD-ROM
#1996762

COREL GALLERY CD-ROM WINDOWS



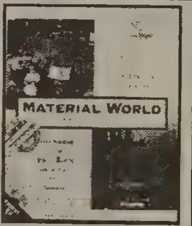
Add flair to your word processing and presentations with over 10,000 clip art images. Includes visual clip art manager; the simplest way to view and choose your clip art.

$\$49^{95}$

IBM CD-ROM
#1908516

MATERIAL WORLD CD-ROM

STARPRESS MULTIMEDIA



Is certain to appeal to everyone interested in photography, culture, and world economy. A visually stunning journey from the crowded streets of Tokyo to a rural village in Ethiopia, Material World lets you experience local customs, indigenous music, prized possessions, and the laughter and tears of families everywhere in our remarkable world.

$\$39^{95}$

MAC/PC
CD-ROM
#1974317

Broderbund THE PRINT SHOP CD ENSEMBLE WINDOWS

Create stunning greeting cards, envelopes, certificates, calendars, banners, business cards, and more. Five great products on one CD.

$\$79^{95}$

IBM CD-ROM
#1952836

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

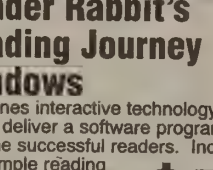
Fry's ELECTRONICS

Prices Good Through May 23, 1995

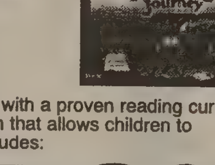
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm

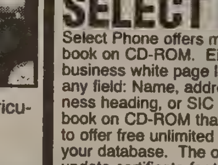
CORPORATE P.O. FAX #



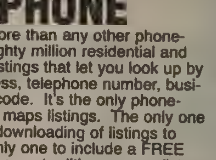
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595



Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950



Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044



Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

MASTERCARD, VISA AND DISCOVER ACCEPTED

DISCOVER NOVUS
VISA
MasterCard

YOUR BEST SOFTWARE BUYS ARE ALWAYS AT FRY'S!

Microsoft® WINDOWS™ for WORKGROUPS

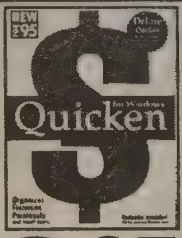
Microsoft WINDOWS FOR WORKGROUPS

All the software you need to start a cost-effective network. Now Windows™ for Workgroups makes networking not only easy but fast. Easily share documents, printers and even messages with everyone in your work group.

$129⁹⁵

IBM
#1876547

Intuit 4.0 DELUXE for Windows™

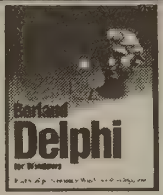

NEW
Deluxe
Quicken

The best-selling financial software just got better. Quick and easy in organizing your finances, loans, investments, budgeting and planning.

$59⁹⁵

IBM
#1955909

BORLAND Delphi for Windows™


Borland Delphi

NEW Delphi, winner of BYTE's Best Technology of Comdex 1994 is here! Delpi provides users with RADical performance never seen before in the industry. Delphi facilitates rapid application development (RAD), allowing programmers to smoothly progress from prototype to production.

$198⁹⁵

IBM
#1997833

Microsoft® Office ACCESS 2.0 For Windows™

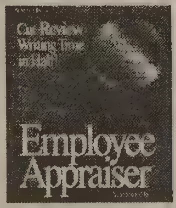
Microsoft Office
ACCESS

Microsoft Access® relational database management system is as easy to use as it is flexible and powerful. The visual approach to managing, financing, presenting, and sharing data lets you work the way you want. Right away. And that makes Microsoft® Access the database that is hardworking without the hard work.

$279⁹⁵

WIN
#1912074

Austin Hayne EMPLOYEE APPRAISER 2.0 For Windows


Cut Review Writing Time in Half!
Employee Appraiser

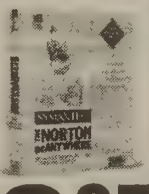
Is the first software designed to speed you through the review process. With the experience and knowledge of managers, human resource professionals, business professors, and labor law experts built right in, it not only helps you wrtite better reviews, it helps you finish in about half the time.

$94⁹⁵

WIN
#1948563

SYMANTEC. The NORTON pcANYWHERE 2.0 FOR WINDOWS

Everything in One Package

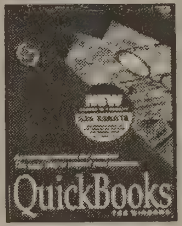

THE NORTON pcANYWHERE

The Norton pcANYWHERE is the complete remote computing solution— for remote control, file transfer, and general communications, via modem or network. Get data from your office computer when you're away from the office. Update files, check your e-mail, print reports, or use office-based applications.

$129⁹⁵

IBM
#1976870

Intuit QuickBooks For Windows


NEW
QuickBooks

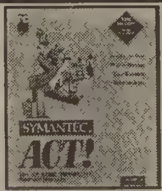
Quickbooks is the easiest and fastest way to organize your business. Features:

- No accounting knowledge needed
- Works like Quicken
- Tracks your whole business

$99⁹⁵

IBM
#1966981

SYMANTEC. ACT! 2.0 for Windows™


SYMANTEC.
ACT!

Manage your business relationships more productively with ACT!, the top-rated, best-selling contact manager featuring an easy-to-use contact database, activity scheduler, report generator, and word processor.

$199⁹⁵

IBM
#1897452

Quarterdeck Qemm 7.5 for Windows

More Memory!
QEMM

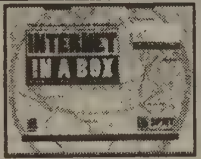
Memory is your most precious resource. Without enough, your PC is slow and programs run out of memory. Buying more RAM isn't always the answer. You need QEMM for total memory management.

$69⁹⁵

IBM
#1964808

INTERNET IN A BOX

The Complete Internet Solution.


INTERNET IN A BOX
SPRY

The original best-selling Internet solution for Windows, Internet in a Box provides everything you need to make the most out of your Internet adventure. From getting connected to getting around, Internet in a Box is the state-of-the-art solution that makes the Internet easy for you.

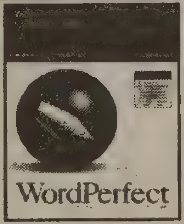
SPRY

$99⁹⁵

WIN
#1986002

NOVELL WordPerfect 6.1 Upgrade for Windows™

Special Upgrade for Previous Owners.


WordPerfect

Write Better; Work Smarter; Finish Faster! Now you can customize the interface for the way you work and the features you use most. And upgrade easily and painlessly from DOS to Windows™ with the upgrade expert and the best file and macro conversion available.

$98⁹⁵

IBM
#1964990

Microsoft® Visual C++ Pro 2 Upgrade

Microsoft VISUAL C++

Special upgrade offer for users of Microsoft® Visual C++, Microsoft® Visual Basic, Borland C++ 4.0 and later, Symantec C++ 6.0 and later, and other Microsoft® development tools. Proof of ownership required.

$249⁹⁵

IBM CD-ROM
#1962954

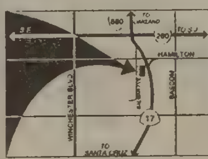
Fry's ELECTRONICS

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

Prices Good Through May 23, 1995

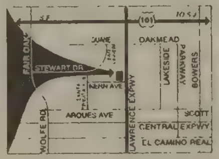
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm


S.F.
880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

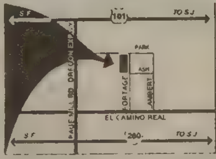
Campbell

600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595


S.F.
101
TO S.J.
FAIR OAKS
STEWART DR.
DUANE
KERN AVE
OAKMEAD
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
SCOTT
CENTRAL EXPWY
EL CAMINO REAL
LAWRENCE EXPWY
WOLFE RD

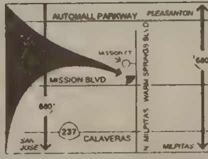
Sunnyvale

1177 Kern Ave.
(408) 733-1770
(408) 735-6950


S.F.
101
TO S.J.
PARK
ASH
PORTAGE
AMBERT
EL CAMINO REAL
PAGE MILL RD OREGON EXPWY
280
TO S.J.

Palo Alto

340 Portage Road
(415) 496-6000
(415) 496-6044


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
680
MISSION BLVD
WARM SPRINGS BLVD
880
237
CALAVERAS
SAN JOSE
N MILPITAS
MILPITAS

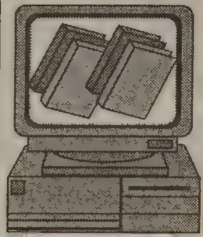
Fremont

440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

CORPORATE P.O. FAX #

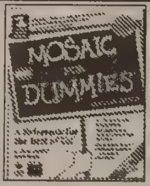
MASTERCARD, VISA AND DISCOVER ACCEPTED

DISCOVER NOVUS
VISA
MasterCard



COMPUTER BOOKS

MOSAIC FOR DUMMIES

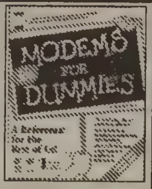


Mosaic is sweeping the Internet like a powerful tidal wave! Maybe you've never surfed the Internet, but want to give it a try. Or perhaps you've actually been there, but don't know where to go next. Mosaic For Dummies, Windows Edition makes riding the World Wide Web wave easy.

$15.95

#1992838

MODEMS FOR DUMMIES SECOND EDITION

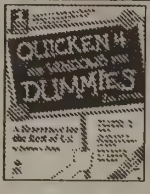


- The fun & easy way to learn about modems
- You first aid kit for installing & communicating with your modem
- What to do when bad things happen - explained in plain English

$15.95

#1992827

QUICKEN 4 FOR WINDOWS™ FOR DUMMIES SECOND EDITION

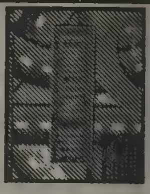


This step-by-step, friendly reference teaches you the fundamentals of Quicken 4 for Windows™ so you can easily manage your budget, monitorand increase business profits, and keep the auditors at bay.

$15.95

#1988750

THE INTERNET



The official book of the Public Television presentation "The Internet Show"

Everything you need to know about the information superhighway. What is the Internet? What can the Internet do for you? How do you connect? What can you find On-line?

$19.95

#1992997

Microsoft Office 4 For Windows™ For Dummies #1941795... **$15.95**

C++ For Dummies #1996278.................................. **$15.95**

Internet Direct Connect Kit #1992791...... **$23.95**

Visual Basic 3 For Dummies #1941980.......... **$15.95**

Quicken 5 For Mac For Dummies #1997202...... **$15.95**

Mac System 7.X For Dummies #1959899...... **$15.95**

Excel For Dummies Second Edition #1879735...... **$13.95**

PCs For Dummies Second Edition #1916757...... **$13.95**

MASTER OF MAGIC OFFICIAL STRATEGY GUIDE

Offering more tables, strategies, and tips than you can shake a wand at, this book gives you:

- Early tactics to quickly lay the foundations of a mighty empire
- A complete analysis-with a copious supply of tables and formulas-200+ magic spells
- Detailed tips and techniques for using every wizard skill and playing every race
- The ultimate roles of the Heroes
- Battlefield strategies
- Economic mastery
- And much much more

$15.95

#2010043

X-COM: UFO DEFENSE OFFICIAL STRATEGY GUIDE

X-COM UFO Defense: The Official Strategy Guide provides the ultimate insider's information on such vital areas as:

- Effectively positioning and designing bases that are the heart of X-COM
- Panning and executing battle strategies both on the ground and in space
- Managing the scarce monetary funds that keep X-COM and the human race intact
- Manufacturing new technology to combat the alien threat

$15.95

#2010205

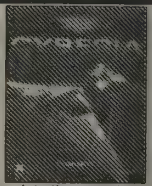
SIMCITY 2000: OFFICIAL STRATEGY GUIDE

SimCity 200 is the ultimate challenge! You must balance logic, creativity foresight and management skills in an ever-changing environment. How do you set funding levels for essential city services without over-taxing your population? What's the best mix of commercial and residential zoning! Are you prepared to deal with fires, floods, and crime? This guide goes beyond the games manual in revealing the secrets, mechanisms, and winning strategies for mastering this complex simulation.

$15.95

#1911431

CYBERIA OFFICIAL STRATEGY GUIDE



The year is 2027, five years after the global economic collapse. As Zak, an outlaw computer hacker on death row, you have few choices. You can languish in prison or undertake a suicide mission into the secret installation code-named "Cyberia." Once there, you must find the mysterious superweapon that may trigger doomsday. Take no chances–all that stands between world peace and the destruction of humanity is you and Cyberia: The Official Strategy Guide.

$15.95

#2009979

Donkey Kong Country #2009647.................. **$7.95**

Tie Fighter: Official Strategy Guide #1946354....... **$15.95**

7th Guest: Official Strategy Guide #1883525..... **$15.95**

Legend Of Kyrandia Book 3 #2010009...................... **$15.95**

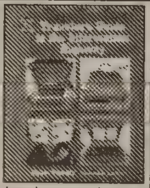
Sega CD Official Game Secrets #1941393... **$10.95**

Alone In The Dark: Official Strategy Guide #1946088... **$15.95**

Master Of Orion: Build An Empire #1911475... **$15.95**

Microsoft® Flight Simulator 5 Strategy Guide #1940657... **$15.95**

TRAVELER'S GUIDE TO THE INFORMATION HIGHWAY

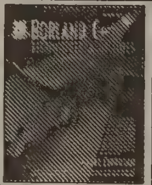


Today's information highway: You can roam its outer reaches without leaving your home or office. Yet finding your way to the on-line services you need can be just as challenging as negotiating the streets of an unfamiliar city. You need a map. And now you have one: *The Traveler's Guide to the Information Highway*.

$19.95

#1995989

BORLAND C++ TECHNIQUES & UTILITIES

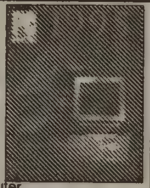


Master programmer Kaare Christian leads this performance-oriented exploration of Borland C++, version 3.1. Focusing on object-oriented programming (OOP) using the Borland class libraries, he shows you how to increase productivity while writing lean, fast, and appealing programs.

$31.95

#1802520

1995 COMPUTER BUYER'S GUIDE

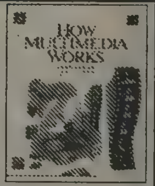


- Clearly presented comparison data compiled for PC Magazine in the United States and the United Kingdom
- Plain-spoken advice for new computer shoppers whether buying for the office or for home
- Special focus on today's hottest hardware topics, including multimedia computers and the Pentium® chip
- Manufacturer references so you can go right to the source and get all of your questions answered

$15.95

#1981328

HOW MULTIMEDIA WORKS



Whatever your computer experience, now you can understand and appreciate the fascinating world of multimedia with *How Multimedia Works*. This volume artfully blends text and full-color graphics to demystify this fast-evolving field.

$19.95

#1942110

How To Use The Internet #1992779............ **$14.95**

How Networks Work #1802656.................................... **$19.95**

How Computers Work #1753592.................. **$18.95**

How Software Works #1876949.................. **$19.95**

How Windows™ Works #1994128.................. **$19.95**

How To Use Excel #1941164... **$14.95**

How To Use Word #1932760... **$14.95**

How To Use WordPerfect For Windows™ #1941669... **$14.95**

Fry's ELECTRONICS

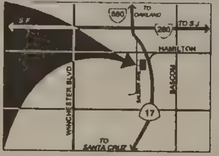
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

Prices Good Through May 23, 1995

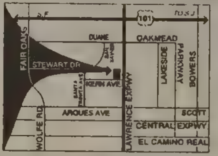
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

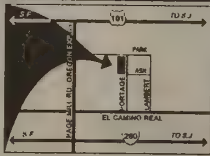
CORPORATE P.O. FAX #



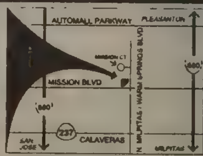
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595



Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950



Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044

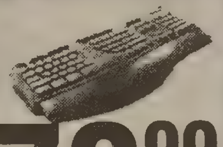


Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

DISCOVER, VISA AND MasterCard ACCEPTED

Input Devices

NATURAL KEYBOARD



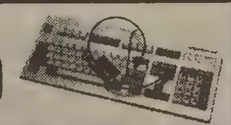
- Split-key, sloped keyboard design promotes a natural wrist position
- Built-in palm rest provides a comfortable resting place for hands while not typing
- Soft, tactile key action
- Standard layout minimizes time required for adapting to split keyboard

Microsoft® **$78.99**

#1952593

Integrated Technology

CompuPhone 2000



Full Featured Telephone and Keyboard in One!

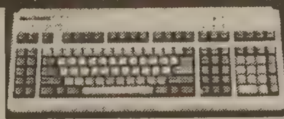
- Includes Hands Free Headset
- Includes Software which can track calls and act as an auto dialer
- Keyboard rings on Incoming calls
- Standard 101-Key layout

$99.99

#1989968

Maxi Switch

ProKEY 124



124-KEY KEYBOARD

ELIMINATES MANY REPETITIVE MOTIONS

Fully Programmable, Remapable and Versatile

$69.99

#1756931

KB101M

101-KEYBOARD

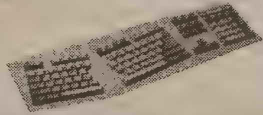
Keyboard Deluxe combines quality you can depend on with deluxe features - all in a familiar 101 key layout.. Deluxe features include:

- Two cable outlets • PS/2 cable adapter • Tactile key feel
- Large L-shaped return key makes data entry a breeze
- 100% IBM® PC/AT, PS/2® and Novelle Netware compatible.

MICROSPEED **$42.99**

#1796379

Split Style ERGONOMIC KEYBOARD

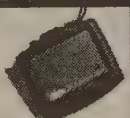


- AT Compatible
- Din 5 Connector
- **Includes FREE Custom WristPad!**

PC CONCEPTS **$48.99**

#1986390

GLIDEPOINT



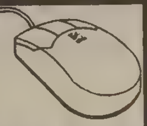
The next generation in PC pointing devices

- PS/2 or Serial Port
- Intuitive cursor control at your fingertips
- Replaces mouse or trackball
- "Taps" for instant selection
- Three-button versatility
- DOS and Windows™ compatible

ALPS **$64.99**

#1971428
#2002606

PROGRAMMABLE 3 BUTTON MOUSE



- Ergonomic Design • 400 DPI
- Total Microsoft Compatibility
- PS/2 or Serial Connectors
- Fully Programmable

LOGITECH **$42.99**

#1566208, #1825666

PROAGIO MOUSE

A Giant Leap in Windows Productivity

- 100% Windows compatible
- Pre-configured for today's most popular software
- 5-button, high-resolution (400 dpi)
- Roller-button simplifies Windows
- side-button for "clicking" between applications
- SmartScroll and PowerScroll eliminate the need for Windows tedious scroll bars

MOUSE SYSTEMS **$47.99**

#2002112

first MOUSE

First Mouse is an excellent 3-button mouse value. It's easy to install and use, with a comfortable sleek shape and large tactile buttons. True ergonomics combine a comfortable shape and software that reduces repetitive double clicking to a single click of a mouse button. First Mouse is built with uncompromising quality for a long life.

LOGITECH **$26.99**

#1825633

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

Fry's ELECTRONICS

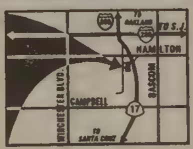
Prices Good Through May 23, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS

MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers



CAMPBELL
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595

AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD.
SAN JOSE
CALAVERAS
MILPITAS

FREMONT
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

101
TO S.J.
PARK
ASH
PORTAGE
EL CAMINO REAL
S.F.
TO S.J.

PALO ALTO
340 Portage Road
((415) 496-6000
(415)496-6044

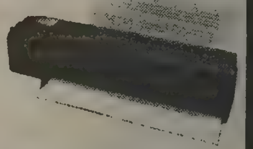
TO S.F.
TO S.J.
101
DUANE
OAKMEAD
KERN AVE
LAKESIDE
ARQUES AVE
CENTRAL
SCOTT
EXPY
EL CAMINO REAL

SUNNYVALE
1177 Kern Ave.
(408) 773-1770
(408) 735-6950

DISCOVER NOVUS
VISA
MasterCard
ACCEPTED

LAPTOP ACCESSORIES

ScanMan PowerPage



Portable Parallel Port Scanner for Windows™.
The complete easy to use portable scanning solution for faxing and copying for Windows.

- 256 Gray Scale
- 25 dpi to 400 dpi Resolution
- Plugs into parallel port
- Optical Character Recognition (OCR)
- Image editing software

#1937938

LOGITECH

$379

QuickShot® by Bondwell

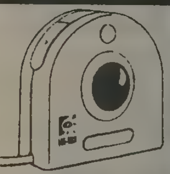
POCKET MOUSE

Features:
100% Microsoft® serial mouse, Tangle-free coil cord,
Dynamic resoultion: 130DPI
Package includes:
Pocket Mouse, Travel Pouch, Mouse driver

$12.99

#1932450

TRACKMAN PORTABLE MOUSE



The Comfortable high-performance portable mouse. Trackman Portable gives you comfort, performance and dependability on portable and desktop systems, on the road and in the office. The thumb operated design fits in your palm for ease and precision with either hand. True ergonomics combines a comfortable shape and software that reduces repetitive motions to a single click of a mouse button.

#1825688

LOGITECH

$48.99

Lead Line

BELKIN 2 FT. PARALLEL CABLE

- Designed specifically for notebooks
- Perfect for portable printers

$6.99

#1966970

KENSINGTON

LEATHER NOTEBOOK TRAVELER® CARRY CASE

- Padded computer and printer compartments
- Internal Frame
- Quick Access and Internal Pockets
- Self-Repairing Zipper
- Removable Shoulder Strap

$169

#1956531

GLIDEPOINT

TrackPad

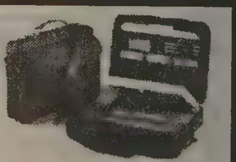
The World's Newest Pointing Device is Operated by the World's Oldest.
It's an easy-to-use, high resolution touch surface that instantly puts a powerful pointing device in the tip of your finger, making using your portable more comfortable, intuitive, and productive.

$64.99

#1960804

TARGUS
A TRADITION OF EXCELLENCE

NOTEPAC



Notebook Carrying Case

14" x 11" x 2.5" (Interior Dimensions)
13" x 9" x 2" (Pocket Dimensions)
Compatible with Powerbook and all popular Notebooks. Available In Assorted Colors.

$29.99

#1693283

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

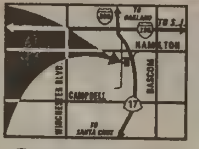
Fry's ELECTRONICS

Prices Good Through May 23, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers


TO OAKLAND
TO S.J.
HAMILTON
WINCHESTER BLVD.
CAMPBELL
BASCOM
17
TO SANTA CRUZ

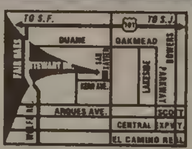
CAMPBELL
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595

AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD.
MILPITAS / WARM SPRINGS BL
237
CALAVERAS
SAN JOSE
MILPITAS

FREMONT
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

101
TO S.J.
PARK
ASH
PORTAGE
LAMBERT
EL CAMINO REAL
S.F.
TO S.J.

PALO ALTO
340 Portage Road
((415) 496-6000
(415)496-6044


TO S.F.
101
TO S.J.
DUANE
OAKMEAD
BOWERS
FAIR OAKS
KERN AVE.
LAKESIDE
PARKWAY
ARQUES AVE.
SCOTT
CENTRAL EXPWY.
EL CAMINO REAL
WOLFE RD.

SUNNYVALE
1177 Kern Ave.
(408) 773-1770
(408) 735-6950

DISCOVER NOVUS
VISA
MasterCard
ACCEPTED

We're at your side.

brother®

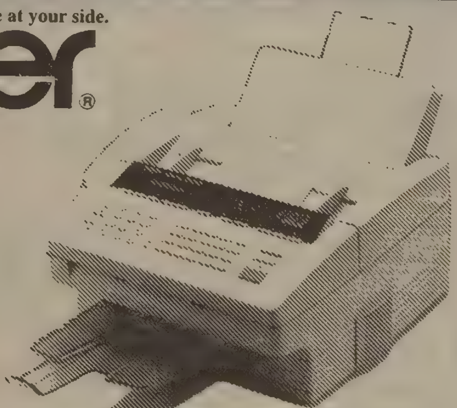
THE WORLD'S BEST FAX MACHINES

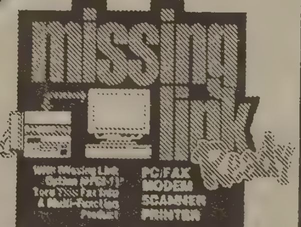
THE WORLDS BEST
FAX MACHINES

We're at your side.

brother®

PLAIN PAPER LASER FAX AND COPY SYSTEM




missing link
Ready
PC/FAX
MODEM
SCANNER
PRINTER

WITH PC LINK CAPABILITY

Brothers state-of-the-art Laser fax machine combines laser print quality with copier capabilities of up to 99 continuous copies along with reduction and enlargement capabilities, and PC Link capability enabling you to utilize the laser fax machine as either a Scanner, PC/Fax Modem, or a printer! Other features include 256k memory for out of paper reception or sequential broadcasting, 30 page document feeder, 200 page sheet paper tray, 140 station memory, 32 level gray scale, and much much more! The best home office investment you will ever make at just...

$699*

After $100 Mail-In Rebate. In-Store Cost $799 plus Tax.

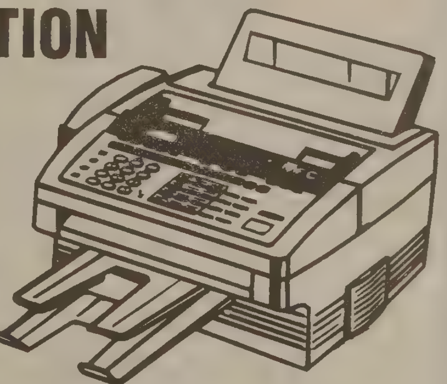
Model PPF-2500
#1925173

We're at your side.

brother®

LASER MULTI-FUNCTION CENTER
MFC
FIVE IN ONE
FAX • PRINTER • COPIER • SCANNER • FAX MODEM

MULTI-FUNCTION LASERFAX MACHINE



The Brother MFC-4500ML five-in-one multi-function center integrates five separate products into one compact desktop package! Fax features include 512K memory for 20 pages of document storage either for broadcasting or out-of-paper reception (upgradable to 70 pages/1.5MB), 200 sheet paper tray, 64 level grayscale, 124 number memory, and much more! As a printer for your computer this machine provides 300 x 300 dpi laser 6 page per minute output as well as 512K memory (expandable to 20MB), Optimized Windows driver, Intelliprint, 45 internal fonts, and Power save mode. Other features include multiple copying up to 99 copies with reproduction/enlargement capabilities, 200 x 400 dpi scanner with Windows PC and fax/modem. The ultimate fax machine for home or office is now available for just...

$999

Model MFC-4500
#2002145

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

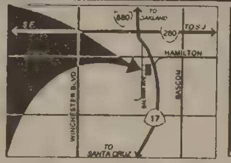
Fry's ELECTRONICS

Prices Good Through May 23, 1995

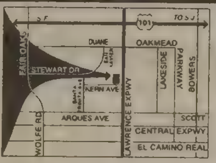
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

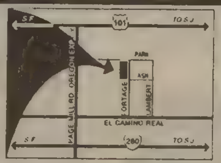
CORPORATE P.O. FAX #


S.F.
880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

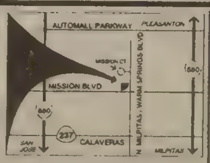
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595


S.F.
101
TO S.J.
DUANE
OAKMEAD
FAIR OAKS
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
WOLFE RD
ARQUES AVE
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950


S.F.
101
TO S.J.
PAGE MILL RD
OREGON EXPY
PARK
ASH
PORTAGE
LAMBERT
EL CAMINO REAL
280
TO S.J.

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
880
680
237
CALAVERAS
SAN JOSE
N MILPITAS / WARM SPRINGS BLVD
MILPITAS

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

DISCOVER, VISA AND MasterCard ACCEPTED

GET ORGANIZED

AT FRY'S ELECTRONICS

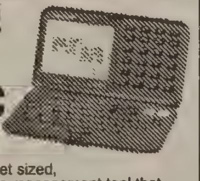
SHARP ORGANIZERS

SHARP. 34K PERSONAL ORGANIZER

Perfect for the business person on-the-go, this compact data bank incorporates a 14 x 3 line display, built-in calendar, schedule, phone/memo, memo pad, expense, clock, anniversary, and calendar functions as well as QWERTY keyboard to simplify data entry. Once you've used this electronic marvel, you won't leave your home or office without it.

$\$49^{95}$

Model YO-110
#1741472

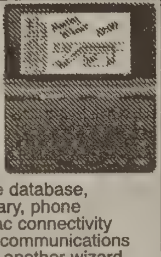


SHARP. 128K ELECTRONIC ORGANIZER

The Sharp YO-370 is a pocket sized, personal information and time management tool that allows you to link it to a PC (with optional accessory). Keep a log of all upcoming projects and sort your list by priority. Track your business and personal expenses and summarize them by day or between days. It also stores birthdays, anniversaries and holidays and provides advance warning for these important events. Stores 1,680 names and numbers or 1,040 schedule appointments. (128K) all for the low price of...

$\$118^{95}$

Model YO-370
#1955367



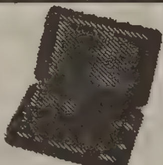
SHARP. 512K PEN BASED ORGANIZER

512K of memory, easy-to-use database, calendar, schedule, anniversary, phone directories, to do lists, PC/Mac connectivity as well as, standard infrared communications capability for sending data to another wizard or a printer, make this Sharp organizer an excellent investment for anyone with too much to do and to little time to do it in! Now just...

$\$399$

Model OZ-9520
#1902897

ROYAL ORGANIZERS



ROYAL® PERSONAL ORGANIZER

Royal has designed a pocket-sized personal organizer with an easy-to-read 3 line by 12 character display, RapidTouch oversized QWERTY keyboard, a schedular function with alarms, telephone directory, memo file to store important notes and information, home/world time, and a 10 digit calculator. All for just...

$\$24^{99}$

Model DM-80
#1997604

ROYAL® 66K PERSONAL ORGANIZER

WITH BUILT-IN AUTO PHONE DIALER

This unique personal organizer allows you to dial stored numbers using any touch tone phone automatically! Other features include 66K memory, an easy-to-read 3 line by 14 character display, RapidTouch over sized keyboard, telephone/business card memory to store names, addresses, phone, fax or pager numbers, schedular, memo file, to-do file, programmable expense manager, and much more. Now only...

$\$59^{95}$

Model DM-166 Plus
#1997637

ROYAL® 128K PERSONAL ORGANIZER

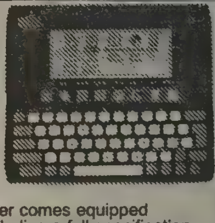
WITH BUILT-IN INFRARED UNIT TO UNIT DATA TRANSFER

Royal has packed the power of 128K of memory storage with the built-in ability to transfer data between selected Royal Organizers via infrared to give you the best personal management value available today. Other features include a wide 3 line by 18 character display, 3 separate programmable expense manager files, telephone/business card directory file, to-do list and memo files, schedular with alarms, home/world time, metric and currency conversion capabilities, and much more. An excellent value at.

$\$79^{99}$

Model DM-2128
#1997589

PALMTOP COMPUTERS



PSION SERIES 3

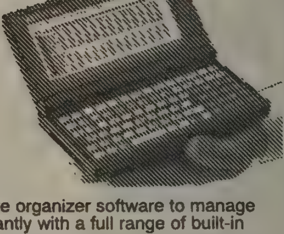
POCKET SIZED 512K COMPUTER

WITH BUILT-IN SPREADSHEETS

Psion has redefined the state of the art in hand held computers with the new Series 3. It may be small, but this pocket-sized programmable computer comes equipped with features found in desktop machines plus powerful built-in software, including a full specification word processor and outliner that's compatible with Microsoft word. When using the Series 3 you will quickly learn from the system of graphic displays and option list how easy the Series 3 is to use. And with Psion's unique Multitasking Operating System, as many of the facilities as you want can be used at the same time! Other features include an automatic phone dialer,world information, a time and personal management file, powerful graphics programming language (OPL/w) which will enable you to write your own applications and two expansion ports for plug in SSD devices for unlimited memory and software.

$\$399$

Model SERIES 3A
#1843567



HEWLETT PACKARD
Authorized Dealer

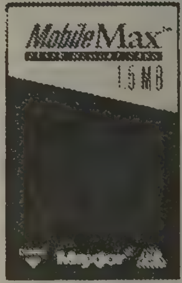
1MB PALMTOP COMPUTER

WITH 80x25 FULL SCREEN
MS-DOS 5.0 & BUILT-IN POCKET QUICKEN

The smallest, lightest HP PC ever comes equipped with complete organizer software to manage your time, tasks and data, plus you can retrieve information instantly with a full range of built-in personal productivity tools. The pull-down menus and dialogue boxes make it simple to master the familiar commands, and the high-resolution display with zoom option is easy to read ! With Lotus 1-2-3 built-in you will have full spreadsheet capability, including graphics and macros. Also includes CC:Mail built-in. Now only...

$\$498^{99}$

Model HP-200LX
#1941670



PCMCIA 1.5MB FLASH MEMORY CARD

For HP Palmtops
Maxtor 1.5MB

$\$149^{95}$

Model Mobile MAX
#1979758

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

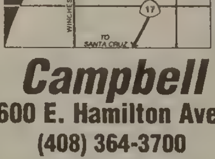
Fry's ELECTRONICS

Prices Good Through May 23, 1995

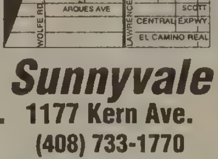
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

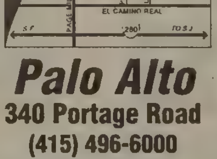
CORPORATE P.O. FAX #



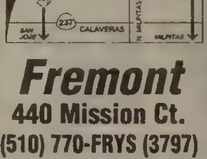
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595



Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950



Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044



Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

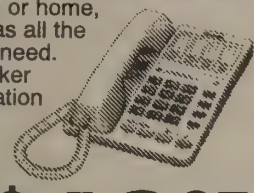
DISCOVER, VISA AND MasterCard ACCEPTED

YOUR BEST PANASONIC HOME OFFICE BUYS ARE ALWAYS AT FRY'S

BUSINESS PHONES

Panasonic

SPEAKERPHONE



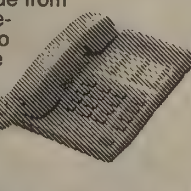
For the office or home, this phone has all the features you need. It has a speaker phone, 28 station automatic dialer, automatic redial and much more.

$49⁹⁵

Model KX-T2315
#1530100

Panasonic

SPEAKERPHONE



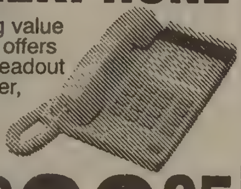
This outstanding value from Panasonic offers one-touch dialing for up to 28 16-digit telephone numbers, auto redial for up to 15 times, redial memory transfer, and a save button for temporary redial memory storage for only...

$59⁹⁵

Model KX-T2355
#1287186

Panasonic

LCD READOUT SPEAKERPHONE



This outstanding value from Panasonic offers a 12-digit LCD readout for phone number, clock, call timer (minutes & seconds), and operating modes. Perfect for the home or office at only...

$69⁹⁵

Model KX-T2365
#163665

MULTI-LINE PHONES

Panasonic

TWO-LINE PHONE

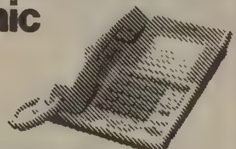
A two line phone doesn't have to cost a fortune. Panasonic has the low cost answer for you. This unit has a convenient auto dialer, conference calling and much more!

$69⁹⁵

Model KX-T3110
#1505313

Panasonic

TWO LINE SPEAKERPHONE



From Panasonic comes this fully featured 2-line speakerphone with 3-way conference call, volume control for speaker and handset, 24-station one-touch dialer, auto redial, flash, separate ringer tone, line status indicator, memo dial, and save redial, all for only...

$79⁹⁹

Model KX-T3165
#1745111

Panasonic

THREE LINE SPEAKERPHONE
WITH LCD DISPLAY

From Panasonic comes this fully featured 3-line speaker-phone with LCD display, 3-way conference call, volume control for speaker and handset, 48-station one-touch dialer, auto redial, flash, separate ringer tone, line status indicator, memo dial, and save redial, all for only...

$169⁹⁵

Model KX-T3185
#1768039

900MHz CORDLESS PHONE

Panasonic

30 CHANNEL PALM-SIZED EXTENDED RANGE 900MHz CORDLESS PHONE

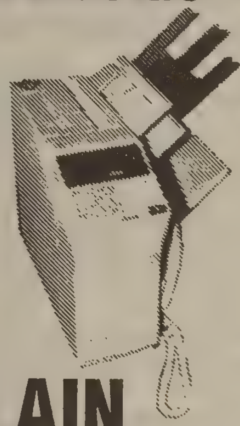
This Panasonic 900MHz cordless phone features a unique palm-sized design with lighted keypad, 30 channel access, high gain rubber antenna, reversible handset, sound charger, noise reduction technology, and more, all for just....

Model KX-T9500
#1948839

$199⁹⁵

PLAIN PAPER FAX MACHINE

Panasonic



PLAIN PAPER FAX MACHINE WITH 20 PAGE MEMORY

The ultimate plain paper fax from Panasonic features a jumbo LCD display, 70 page paper cassette, adjustable letter /legal tray, 32 level halftones, polling, activity reporting, 20 page document feeder, broadcasting to 128 locations, fax transfer, enlargement and reduction copier functions, fax/tel switch, 28-station one-touch dialer, 100-station speed dialer, telephone directory with alpha-search, and much more! Now just.....

Model KX-F3000
#1850626

$698

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

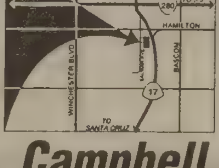
Fry's ELECTRONICS

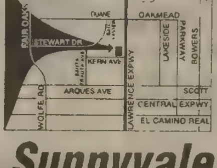
Prices Good Through May 23, 1995

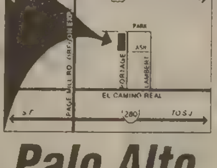
Limit Rights Reserved. Not Responsible for Typographical Errors.

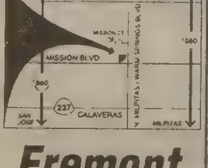
STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

CORPORATE P.O. FAX #


S.F.
880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ


S.F.
101
TO S.J.
DUANE
OAKMEAD
FAIR OAKS
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
SCOTT
WOLFE RD
LAWRENCE EXPWY
CENTRAL EXPWY
EL CAMINO REAL


S.F.
101
TO S.J.
PARK
ASH
PORTAGE
LAMBERT
EL CAMINO REAL
S.F.
280
TO S.J.


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
680
MISSION BLVD
880
237
CALAVERAS
SAN JOSE
MILPITAS

Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

DISCOVER NOVUS
VISA
MasterCard

DISCOVER, VISA AND MasterCard ACCEPTED

THINK FRY'S FIRST
FOR HOME OFFICE
SERVICE, SELECTION & SAVINGS

SPEAKERPHONES

SPEAKERPHONE WITH 20 NUMBER MEMORY

The convenience of a handsfree speakerphone allows you to do other tasks while having a conversation on the phone. Features include 20 number memory, last number redial, mute, in-use indicator light, and more. An excellent addition to any home or office at only...

$14.99

#1915723

AT&T

SPEAKERPHONE

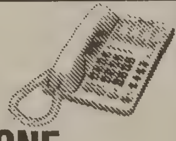
AT&T's popular speakerphone comes equipped with 12 number memory, redial, ringer adjust, mute, flash, and receiver volume control (a helpful feature for those who are hearing impaired or in a noisy environment). Now just..

$49.95

Model 706
#1781315

Panasonic

LCD READOUT SPEAKERPHONE



This outstanding value from Panasonic offers a 12-digit LCD readout for phone number, clock, call timer (minutes & seconds), and operating modes. Perfect for the home or office at only...

$69.95

Model KX-T2365
#163665

SONY.

TWO-LINE FEATURE PHONE WITH SPEAKERPHONE

Phones with 2-line operation are relatively common, but this phone offers a distinctive ring for each line! The LCD indicator will tell you the number dialed and the time. Now only..

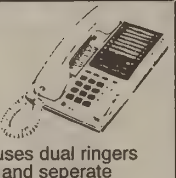
$79.95

Model IT-D250
#1516904

MULTI-LINE PHONES

GENERAL ELECTRIC
GE. We bring good things to life

TWO-LINE TELEPHONE



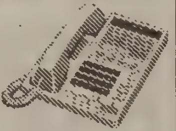
This ingenious telephone uses dual ringers with distinct ringer sounds and seperate ringer controls for each line! By pressing the conference button you will be able to conduct a three way conversation. An excellent value at only...

$39.95

Model 2-9420
#1674288

Panasonic

TWO-LINE PHONE



A two line phone doesn't have to cost a fortune. Panasonic has the low cost answer for you. This unit has a convenient auto dialer, conference calling and much more!

$69.95

Model KX-T3110
#1505313

GENERAL ELECTRIC
GE. We bring good things to life

TWO-LINE SPEAKERPHONE

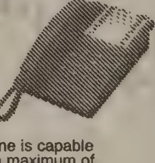
This fully lined speakerphone comes equipped with three way conference calling, dual ringers, led line-in-use indicator, 32 number memory, busy redail, one-touch redail, and flash function for in office applications or with enhanced telephone company services for only....

$69.95

Model 2-9435
#1674303

GENERAL ELECTRIC
GE. We bring good things to life

FOUR-LINE SPEAKERPHONE



This deluxe four-line speakerphone is capable of handling up to four lines with a maximum of 16 stations. Its convenient 32 number one-touch telephone memory, along with all station page, intercom, call transfer, busy redial, flash and much more make this the perfect addition to any home or office at just....

$149.95

Model 2-9450
#1768637

ALL DIGITAL ANSWERING MACHINES

BELL Phones
BY NORTHWESTERN BELL PHONES

ALL DIGITAL ANSWERING MACHINE WITH TIME DAY STAMP & 13 MINUTE CAPACITY

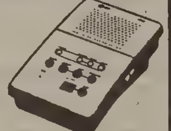
This fully featured all digital answering machine from Northwest-ern Bell comes equipped with Time/Day Stamp, Programmable Security, Selective Skip or Erase, Call Screen, Extension Pickup, Auto Disconnect, Multiple Memo Record, Toll Saver, VOX,13-Minute Capacity, Remote Access, and much more! An incredible value at just...

$49.99

Model 700
#1964820

AT&T

ALL DIGITAL ANSWERING MACHINE WITH TIME/DAY STAMP



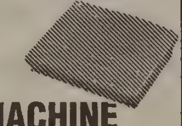
This AT&T answering system utilizes tapeless digital technology to ensure consistent recording quality over the life of the system. The convenience of new message playback, outgoing message bypass, remote system turn on or off and remote message recording makes this an excellent value at only...

$69.95

Model 1720 #1888623

GENERAL ELECTRIC
GE. We bring good things to life

ALL DIGITAL ANSWERING MACHINE WITH THREE MAIL BOXES



With three mailboxes to choose from, members of the household can have messages stored for them in their own mailbox! The all digital capability eliminates the need for moving parts and allows for instant playback of incoming messages-no need to wait for a tape to rewind or fast forward! Other features include voice time/day stamp, two outgoing messages, digital counter, selective message erase and much more for only...

$79.95

Model 2-9876
#1839261

SONY.

TELEPHONE AND ALL DIGITAL ANSWERING MACHINE WITH VARIABLE SPEED MESSAGE PLAYBACK

Sony has taken digital technology to a new dimension with this beautifully -designed, all digital answering system. The variable-speed message playback controller allows you to speed up (to 1 6 times speed) or slow down (to 0.7 speed) playback of messages without changing pitch. In addition, you can skip, repeat or backspace messages. The multi-function LCD display functions as a digital message counter, clock, call timer, answer mode indicator, and back-up battery strength indicator, while the voice time/day stamp automatically records the time of the message receipt after each message. An invaluable addition to any home or office at only...

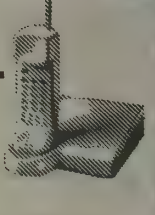
$99.99

Model IT-A2500 #1836615

900 MHz CORDLESS PHONES

uniden

40 CHANNEL 900MHz CORDLESS PHONE



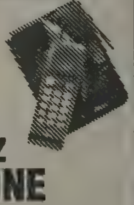
Uniden's latest 900MHz cordless phone gives you unparalleled range and performance along with premium features that include 40 channel selection, call monitor, 2-way/hands-free intercom, 10 number memory, mute, last number redial, flash, and much more, all for just....

$189.99

Model EXP-901
#1965005

muratec

60 CHANNEL ULTRA LONG RANGE 900MHz CORDLESS PHONE

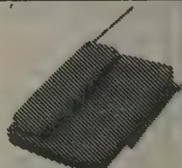


Compact in design, but powerful in performance, this 60 channel, long range 900MHz phone offers 10 number speed dialer, last number redial, flash, intercom/ paging, mute, and much more. Now just...

$199.95

Model CP-900
#1986611

DIGITAL 900MHz DUAL KEYPAD SPEAKERPHONE



From VTech a leader in 900MHz cordless phone technology come this feature packed unit with 20 channel selection, a digital voice encryption system, out-of-range indicator, four programmable ringer types, one-way page, 10 number memory, mute, flash, hold, and last number redial all for the incredible price of only....

$229

Model 900DX
#1852972

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

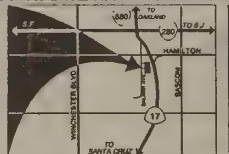
Fry's ELECTRONICS

Prices Good Through May 23, 1995

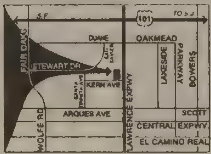
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

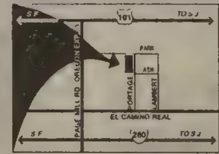
CORPORATE P.O. FAX #



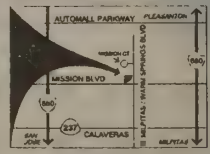
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595



Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950



Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044



Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

DISCOVER NOVUS
VISA
MasterCard

DISCOVER, VISA AND MasterCard ACCEPTED

EXPERIENCE THE REVOLUTION OF

DIGITAL TV

- LASER DISC QUALITY VIDEO
- CD QUALITY DIGITAL AUDIO
- OVER 150 CHANNELS OF ENTERTAINMENT

RCA

DSS™ DIGITAL SATELLITE SYSTEM

DIRECTV

JUST A SAMPLE OF WHAT'S AVAILABLE!

Discovery ESPN C-SPAN CARTOON NETWORK TRIO TNT TNN CNN INTERNATIONAL NBC The Disney Channel COURT USA NETWORK CNN E! Touchstone Pictures TRAVEL TBS MIRAMAX UNIVERSAL CMT A&E COLUMBIA PICTURES TRISTAR PICTURES C-SPAN2 Walt Disney PICTURES

USSB

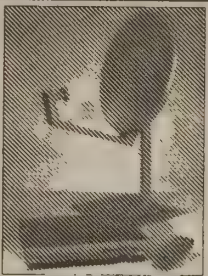
USSB OFFERS

5 HBO CHANNELS
3 SHOWTIME CHANNELS
2 "THE MOVIE" CHANNELS
3 CINEMAX CHANNELS AND MORE

Multi-Channel HBO MTV SHOWTIME SHOWTIME 2 VH1 THE MOVIE CHANNEL Multi-Channel Cinemax ALL NEWS CHANNEL COMEDY CENTRAL LIFETIME NICKELODEON FLIX NICK AT NITE

RCA

DIGITAL SATELLITE SYSTEM (DSS) DISH AND RECEIVER



Enjoy over 150 channels of top-notch entertainment with the crystal, digital clarity of the new RCA DSS system. CD quality sound and over 400 lines of video resolution, provide an incredible entertainment experience. Let Fry's and RCA help you drive on the Information Superhighway!!!

MODEL DS-1120WR
#1942578

$698

RCA

ADVANCED DIGITAL SATELLITE SYSTEM (DSS) DISH AND RECEIVER

Enjoy over 150 channels of top-notch entertainment with the crystal, digital clarity of the new RCA DSS system. CD quality sound and over 400 lines of video resolution work together to give an outstanding home theatre experience. This advanced DSS unit will allow you to hook up and additional IRD/ Decoder (Optional purchase) on a second TV.

MODEL DS-2430WR
#1942589

$898

Fry's ELECTRONICS

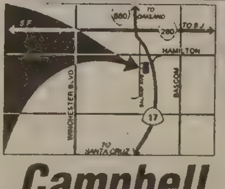
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

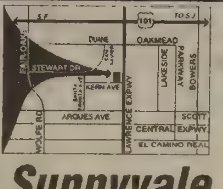
Prices Good Through May 23, 1995

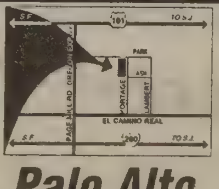
Limit Rights Reserved. Not Responsible for Typographical Errors.

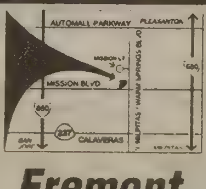
STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

CORPORATE P.O. FAX #


S.F.
880
TO OAKLAND
280
HAMILTON
BASCOM
WINCHESTER BLVD
17
TO SANTA CRUZ


S.F.
101
TO S.J.
FAIR OAKS
DUANE
OAKMEAD
STEWART DR
KERN AVE
LAKESIDE
BOWERS
ARQUES AVE
WOLFE RD
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL


S.F.
101
TO S.J.
PARK
PORTAGE
EL CAMINO REAL
PAGE MILL RD
280
TO S.J.


AUTOMALL PARKWAY
PLEASANTON
680
MISSION BLVD
880
CALAVERAS
237

Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

DISCOVER NOVUS VISA MasterCard

DISCOVER, VISA AND MasterCard ACCEPTED

Product Spotlight

UPDATES

Elektroson Inc. announced **price cuts on GEAR 2.5 PLUS** for Macintosh, the latest version of its full-featured CD-R formatting software, which is Power PC native. Prices are $299 for the ISO version and $799 for the multimedia version. Elektroson USA, 10 Presidential Blvd., Suite 125, Bala Cynwyd, PA 19004. (610)617-0850.

HSC Software is **reducing the price of Live Picture by 75%** to a suggested retail price of $995 in anticipation of its plans to ship Live Picture v2.0, which has several new features and capabilities. HSC Software, 6303 Carpinteria Ave., Carpinteria, CA 93013. (805)566-6200.

Individual Software has shipped **AnyTime for Windows v3.0**. The new version of the organizer program includes drag and drop, autodial, and automatic envelope printing, and is available for $24.99. Individual Software, Inc., 5870 Stoneridge Dr., #1, Pleasanton, CA 94588. (510)734-6767.

Mastersoft has released **Viewer 3.1**, an upgrade to its powerful file-viewing utility for Windows 3.1 which allows users to view files in more than 120 formats without the application that created them. Suggested retail price is $49. Mastersoft, Inc., 8737 E. Via de Commercio, Scottsdale, AZ 85258. (602)948-4888.

New England Business Service is offering **Page Magic as an upgrade to users of Publish It!** Page Magic can read all Publish It! files and comes with predesigned templates that are compatible with NEBS's line of preprinted business paper. Page Magic is available to users of Publish It! for $29.95 through June 30; its SRP is $69.95. New England Business Service, Inc., 20 Industrial Park Dr., Nashua, NH 03062. 1-800-882-5254.

ParcPlace released **VisualWorks J2.0** the first localized release of its client/server tool for developers who require the ability to write fully native Japanese applications. It is priced at $5500 for Windows 3.1J and Windows NT 3.1J, and $8500 for Solaris 2.3J. ParcPlace Systems, Inc., 999 E. Arques Ave., Sunnyvale, CA 94086-4593. (408)481-9090.

Semaphore is shipping **ZP4 v14.4 for Windows and Macintosh**, its address correction software with the US Postal Service's address database for the entire country. The price is $125 for CD-ROM. Semaphore Corp., 207 Granada Dr., Aptos, CA 95003-5007. (408)688-9200.

SourceMate upgraded its nonprofit accounting software **AccountMate Professional Fund Accounting to v4.0**. The upgrade features a completely new user interface and runs exclusively in FoxPro. $395 for single-user modules and $695 for unlimited multiuser modules. SourceMate Information Systems, Inc., 20 Sunnyside Ave., Mill Valley, CA 94941. (415)381-1011.

SQA announced the availability of **SQA TeamTest 3.1**, the latest version of its Windows automated client/server testing tool. The price of $2495 per seat includes sixty days of free 800 technical support and product upgrades. SQA, Inc., 1-800-228-9922.

Tally Systems Corp. released **NetCensus 2.5**, a software package that automatically tracks hardware and software components on networked and standalone workstations. Prices are based on number of copies: $15.95 per copy for one hundred, $12 per copy for one thousand, etc. Tally Systems Corp., P.O. Box 70, Hanover, NH 03755. 1-800-262-3877.

Product Reviews

Windows Software Reviews

Elastic Reality

Published By: Elastic Reality, Inc.
List Price: $495
Reviewed By: Douglas J. Nakakihara

Transform one person into another (morphing) or just bulge someone's eyes out (warping)—on a computer of course—with Elastic Reality. Using a basic concept of defining source and target areas, you create a sequence of frames (i.e., an animation) from the source to the target.

The interface to Elastic Reality is straightforward and extremely well done—it couldn't be much simpler. The manual also offers many tutorials. I was surprised how easy it was to get stunning results. Of course, you can get complex if you like, using freehand spline curves, tangents, control points, groups of defined areas, motion, and transparency envelopes, etc. You can also do keyframed morphs on image sequences.

To get an idea of what the final effect will look like, you can view a wireframe-preview or quickly render any frame in the morph. Elastic Reality can also be used for direct image compositing, as well as creating black-and-white mattes for compositing.

Technoland

We Do Business Your Way, Since 1986!

(408) 992-0888

UPGRADE & REPAIR *EXPRESS*

**FRIENDLY SERVICE*
**FAST TURN-AROUND TIME*
**100% SATISFACTION GUARANTEE!*
**PICK-UP & ON-SITE AVAILABLE*
**DIAGNOSTIC REPORTS PROVIDED*
**MEMORY TRADE-IN ACCEPTED*

MEMORY *EXPRESS*

*WHILE-U-WAIT INSTANT SERVICE
*Great Trade-In Value For Your Old Memory
*MEMORY CARD FOR NOTEBOOKS:
POWERBOOK, TOSHIBA, COMPAQ,
IBM THINKPAD AND NEC

1x9 70ns (3/9 CHIP)	$41/44
4x9 70ns (3/9 CHIP)	135/165
16x9 70ns	608
1x32/36 70ns	148/165
2x32/36 70ns	295/335
4x32/36 70ns	485/560
DRAM & SRAM	CALL
NOTEBOOK MEMORY CARD	BEST PRICE

HARD DRIVE *EXPRESS*

*HARD DRIVE INSTALLATION
*TRANSFER DATA
*VIRUS DETECTION & REMOVAL

170MB/270MB IDE HDD 3.5"	$135/155
420MB/540MB IDE HDD 3.5"	179/195
730MB/850MB IDE HDD 3.5"	245/265
1.0GB/1.2GB IDE HDD 3.5"	370/385
1.0GB/2.1GB SCSI HDD 3.5"	529/905
SUPER IDE w/IO ISA/VLB	15/33
SCSI-II XL221 FDD/HDD ISA w/Drivers	48
SCSI-II XL525 VLB 4FDD/HDD w/IO w/Drivers	99
ADAPTEC 1542CF/CFK	179/255
ADAPTEC 2842KIT/2940 KIT	245/299

MULTIMEDIA *EXPRESS*

*SOUND CARD & CD-ROM INSTALLATION

SONY 2X Speed CD-ROM Int	$109
MITSUMI 4X Speed CD-ROM Int	189

MULTIMEDIA PACKAGES:

TECH16 MPC PACK Double Speed CD-ROM 250ms, 16-Bit Sound Card, Stereo Speakers, Super 10 Value Pack CD Titles	$239
TECH-4X MPC PACK 4X Speed IDE CD-ROM 230ms, 16-bit Sound Card, 40W Shielded Speakers, Super 10 Value CD Titles	$328
TECH-4X SCSI MPC PACK Toshiba 4X Speed SCSI-2 CD-ROM 120ms, 16-Bit Sound Card, 16-Bit SCSI-2 Controller Card, 40W Shielded Speakers, Super 10 Value Pack CD Titles	$478

REPAIR & M/B *EXPRESS*

*Monitor, M/B, Power Supply & Repair
*90-Day Warranty for Repair Jobs, 1-Year Parts & 5-Year Labor Warranty For New Parts

386DX-40 MHz w/128K Cache	$108

486 & PENTIUM Motherboards: Ziff Socket, GREEN Functions, with 256KB Cache Exp. to 512K/1MB

VESA Cyrix 486DX-40/DX2-66 MHz	$198/238
VESA Intel 486DX-33/DX2-50 MHz	248/258
VESA Intel 486DX2-66/DX4-100 MHz	298/288
VESA AMD 486DX2-80/DX4-100 MHz	268/348
VESA-PCI Intel 486DX2-66/DX4-100 MHz	348/438
PCI Intel Pentium 60/66 MHz	468/488
PCI Intel Pentium 90/100 MHz	868/1008
EISA-PCI Dual-Processor Pentium 90 MHz	1998

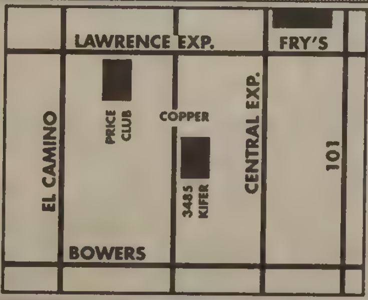
We Specialize In Hard-To-Find Items • Please Call For Other Parts & Systems

No Surcharges for Credit Card Purchases

No **Annoying Voice Mail Answering Machines**

Yes We Gladly Accept P.O.'s From Corp., Educ. and Government Accounts

Yes **We Will MEET or BEAT ANY ADVERTISED PRICE!**



COME SEE OUR SHOWROOM!

1 Block Away from Price Club at the Intersection of Kifer and Copper
3485 KIFER ROAD SANTA CLARA, CA 95051

TEL: (408) 992-0888

VISA

FAX: (408) 992-0808
EMail: Quotation@aol.com

MasterCard

MON-FRI 9 AM-6 PM/SAT 10 AM-5 PM

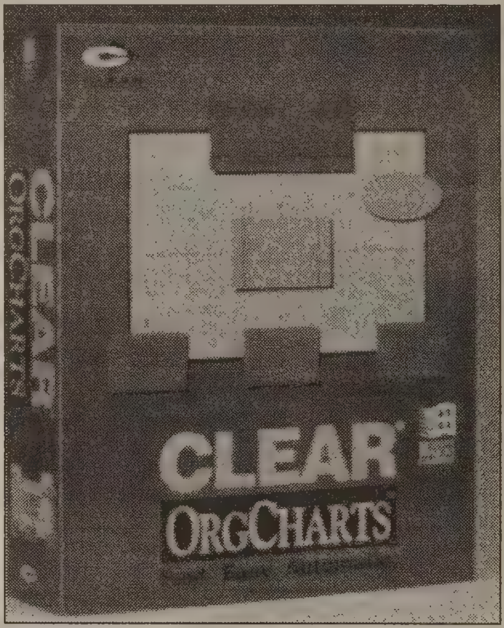
Prices subject to change w/o notice, not responsible for typographic errors.

Product Reviews *continued...*

A program called Transjammer is included to do A/B roll-type transitions between images. It comes with many effects, but since it reads Elastic Reality project files, you can "roll your own." A wide variety of still and animation formats are supported. This package requires at minimum a 386, 4MB RAM (8MB recommended), and 10MB HD space. Elastic Reality is a high-end product that has been used in the production of many commercials, TV shows, and feature films. However, it is very easy to use and a lot of fun! (Elastic Reality, Inc., 925 Stewart St., Madison, WI 53713. 608/273-6585)

CLEAR OrgCharts for Windows

Published by: CLEAR Software
List Price: $99
Reviewed by: Woody Liswood



CLEAR OrgCharts for Windows

CLEAR OrgCharts, the latest addition to the CLEAR Software line of flowcharts, focuses on organizational charts. As a Human Resources professional I am a big fan of organizational chart programs. Whenever a new program is introduced, I am quick to test it to see if it can make my life easier. CLEAR OrgCharts is easy to use, does the job quickly, and within a LAN environment works with you rather than against you.

In the world of org chart programs, CLEAR is not the most complicated: it doesn't have the most features, and doesn't work from a database, like many of its competitors. It is, however, the easiest to use org chart program I have found—I had no difficulties getting the organizational levels correct and subordinates were easy to enter, always appearing on the printed charts where I wanted them.

CLEAR OrgCharts is fairly unique, presenting two windows: one illustrates how the chart will look, while the second window is where you type the organizational outline that builds the chart. The chart is built as you enter information within tabbed fields. As you tab across, you create boxes for various bosses and subordinates. The text that starts on the same tab level appears on the same organizational level. Vertical lines between text entries control how many lines of text are in the chart.

Additional charts, side by side on the same page, are also easy to create. For example, the office of the president might include the president, the administrative assistant, and a set of vice presidents. However, three additional people also report to the administrative assistant. By skipping a line at the bottom of the tabbed page, you will start a separate chart on the same page showing the administrative assistant and all of the positions which report to that position.

One of the major hassles I have with organizational chart programs is how to display everything. Inevitably, there is always at least one box that seems out of place or incorrectly positioned. CLEAR OrgCharts offers a variety of display methods, called Diagram Artists. There are four of them, named after artists—Renoir, Rembrandt, Van Gogh, and Monet. In addition to these views, you can change the direction of the chart.

The feature which won my heart is the ability to print a complete chart on a single piece of paper. CLEAR OrgCharts automatically resizes everything to fit.

MEMORY
WE BUY AND SELL DRAM, SIMM, SIPPS
AT VERY GOOD PRICES, IBM COMPATIBLE & APPLE
CALL FOR LATEST PRICES & AVAILABILITY

COMPAQ
PARTS & ACCESSORIES
30% OFF

apple
LOWEST PRICES ON MEMORY
SPECIAL!!!
140/160/170 MB Notebook Memory...SALE
426 MB HARD DRIVE...$195

IBM & COMPATIBLES
LOWEST MEMORY PRICES

WE CERTAINLY WELCOME OEM & RESELLERS

WE BEAT ANYONE'S PRICES!

C.G.I. TECHNOLOGY

CALL FOR LOWEST GUARANTEED PRICE!
(408) 973-9840
FAX: (408) 973-1925

Diskette Special Wholesale Prices!!
24¢ ea. Formatted HD 3.5" (min.500: label incl.)

End Users/Retailer/System House	Qty50	Qty250	Qty500
3.5"DS/HD Formatted	29¢	27¢	24¢
3.5"DS/DD Formatted	23¢	22¢	21¢
OEM/Duplicator Disks (65% Clip.)			
3.5"DS/HD	32	31¢	30¢

*Call for *Quantity Discounts*

- Duplication Services
- Full Range of Cables
- Adapters
- Glass Filters
- Diskette/CD Storages
- Computer accessories

100% Guarantee; Error Free; UPS/Fedex; One Day Shipping
Lowest Price Guaranteed !!
Extra Discount
COLORED disk add 1¢ ea. only!! Call & Order Now!!
800-583-5833
(415)583-9933
FAX (415)583-9932
PROMEDIA™ Computer Supplies, Ltd. Co.
432 No. Canal Rd. Ste 1, So. San Francisco, CA 94080

AMERICAN COMPUTER RESEARCH
BRINGS YOU
LIFETIME LABOR WARRANTY

BEST PRICES IN TOWN!

PREMIUM SYSTEMS

Pentium P5-60/256K VLB - PCI	$1198
Pentium P5-66/256K VLB - PCI	$1228
Pentium P5-90/256K PCI	$1498
Pentium P5-90/256K VLB - PCI	$1508
Pentium P5-75/256K VLB - PCI USA	$1348
Pentium P5-90/256K VLB - PCI USA	$1568
Pentium P5-100/256K VLB - PCI USA	$1718
Intel Pentium P5-60/256K PCI	$1258
Intel Pentium P5-66/256K PCI	$1308
Intel Pentium P5-90/256K PCI	$1518
Intel Pentium P5100/256K PCI	$1698

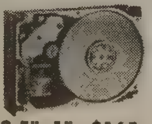
486SLC-33 ISA	$688
486DLC-40/128K VLB	$748
486SX-25/128K ISA/VLB	$745/758
486SX-33/128K ISA/VLB	$768/778
486DX-33/128K ISA/VLB	$764/777
486DX-40/128K ISA/VLB	$793/803
486DX2-50/128K ISA/VLB	$768/778
486DX2-66/128K ISA/VLB	$788/748
IBM 486SLC2-66/64K VLB	$825
IBM 486 BL-75/256K VLB	$865
GENOA 486DX2-66/256K PCI	$835
GENOA 486DX2-66/256K VLB	$985

—SYSTEM CONFIGURATION—

- Motherboard w/ CPU
- 4 MB RAM 70NS
- 200MB HDD
- 1.44 Floppy Drive
- IDE 2HD/2FD Controller w/ 2S/1P/1G
- 512KB SVGA Card
- 14" SVGA .28 Color Monitor NI
- 101-Key Enhanced Keyboard
- Enhanced Case w/ Power Supply
- Logitech Compatible Mouse

— UPGRADES —

• 340MB Hard Drive	Add $45
• 420MB Hard Drive	Add $55
• 540MB Hard Drive	Add $90
• 15" Non-Interlaced Monitor	Add $90
• VLB IDE Controller	Add $15
• PCI Bus VGA Card w/ 1MB	Add $90
• Cirrus Logic/Trident VLB w/ 1MB	Add $30
• Window Accelerator w/ 1MB	Add $30
• Diamond S.S. Pro VLB w/ 1MB	Add $60
• 250MB Tape Back-up	Add $130
• 16-Bit Ethernet Card	Add $32
• Deluxe Speakers 24W	Add $24
• Double Speed CD-ROM w/ Card	Add $124
• Sound Blaster Pro Deluxe	Add $80



Maxtor®

IDE HARD DRIVES

345MB	7345A	14ms	3.5"x1"	$165
540MB	7546	12ms	3.5"	$180

CONNER

IDE HARD DRIVES

540MB	IDE	13ms	3.5"X1"	$165
		12ms	3.5"x1"	$165
			1"	$175

WESTERN DIGITAL

IDE HARD DRIVES

340MB	WD2340	12ms	3.5"X1"	$165
420MB	WD2420	13ms	3.5"x1"	$170
540MB	WD2540	12ms	3.5"x1"	$180

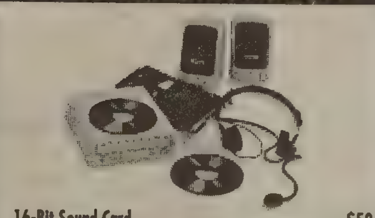
100% FINANCING AVAILABLE ON APPROVED CREDIT.

90 DAYS SAME AS

CASE WITH POWER SUPPLY

Mini Tower Case w/230W Power Supply	$34
Desktop AT Case w/200W Power Supply	$43
Medium Tower Case w/230W Power Supply	$60
Full Tower Case w/250W Power Supply	$76
UPS 400VA/600VA/900VA	$106/148/238

CD-ROM / MULTIMEDIA



16-Bit Sound Card	$50
Creative Labs	
Sound Blaster Pro 16 MCD	$75
Discovery CD 16 Upgrade Kit	$278
Edutainment CD 16 Upgarde Kit	$376
MediaVision Jazz 16 (AT/SCSI)	$54/102
Chinon CDS535 (Int.) SCSI	$186
Panasonic CD-562 (Double Speed)	$116 (w/Card 124)
Sony CD-ROM (Double Speed)	110 (w/Card 118)
Teac CD-55A (AT) 4-Speed	$168 (w/Card 178)
Toshiba XM-3501B (SCSI) 4-Speed Int.	$278
Trantor SCSI Host w/Driver	$43
Turtle Beach Monte Carlo 16-Bit (AT)	$68
Deluxe Speakers	$6
80 Watt/120 Watt Speakers	$44/56

PRINTERS

Canon BJ 200e	$225
Panasonic 2123	$199
Deskjet 1200c / Postscript	$1,375 / 1,975
Deskjet 500 / 500c / 560c	$295 / 395 / 529
HP Laserjet 4 / 4M / 4L / 4ML	$1,365 / 1,865 / 635 / 978

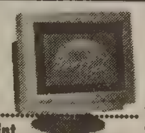
FLOPPY DRIVES/TAPE BACKUP

Teac 1.2MB 5.25	$40
Teac 1.44MB 3.5	$30
Teac Dual Floppy Drive 1.2 & 1.44MB	$83
Tape Backup 350MB	$165
Conner 250MB Tape Backup	$126

NETWORK CARD / SOFTWARE

3COM	
3C509-16 Etherlink III 16-Bit Coax/TP	$104 / 104
COMPULAN	
NE 600E 16-Bit TP	$55
NE 200E 16-Bit Coax	$62
NOVELL CARDS	
NE2000 16-Bit Coax	$75
NE2000 16-Bit TP	$69
NOVELL SOFTWARE	
3.12 for 5 / 10 / 20 Users	$595 / 1,290 / 1,895
Users	$820 / 1,820 / 2,630

MONITORS



14" SVGA 1024x768 .39	$168
14" SVGA 1024x768 .28 Int.	$182
14" SVGA 1024x768 .28 NI	$198
NEC 5FGe 17" 1024x768 .28dpi	$936
NEC XE 15 / XP 15	$524/644
NEC XE 17 / XP 17	$644/944
NEC XE 21/ XP 21	$1,894/2,3282
Viewsonic 15E 15" 0.28DP	$325
Viewsonic 17 17" 0.28DP	$662
Viewsonic 20 20" 0.28DP	$1224
Viewsonic 21 21" 0.26 DP	$1592
Mag DX15F 15" 0.26DP	$336
Mag DX17F 17" 0.26DP	$610
Nanao F340iw	$625
Nanao F550iw	$862
Nanao F560iw	$1146

VIDEO CARD/VLB-VIDEO CARDS

Winodws Acclerators w/1MB	$52
ATI	
Wonder PCI/VLB1MB DRAM	$94
Ultra Plus PCI/VLB 2MB DRAM	$158
Ultra Pro PCI 2MB VRAM (Mach 32)	$208
WinBoost PCI/VLB 1MB DRAM (Mach 64)	$138
WinBoost PCI/VLB 2MB DRAM (Mach 64)	$175
WinTurbo 64 PCI/VLB 2MB VRAM (Mach 64)	$254
WinTurbo 64 PCI/VLB 4MB VRAM (Mach 64)	$442
DIAMOND	
Speed Star SE PCI/VLB 1MB DRAM	$89
Speed Star SE PCI/VLB 2MB DRAM	$138
Stealth 64 PCI 1MB/2MB (DRAM)	$112/154
Stealth 64 PCI/VLB 2MB (VRAM)	$256
Stealth 64 PCI 4MB (VRAM)	$396
Viper 2MB PCI	$242
ORCHID	
Kelvin EZ PCI/VLB 1MB (DRAM)	$94/94
Kelvin VLB (64-Bit) 1MB/2MB	$119/168
Kelvin PCI (64-Bit) 1MB/2MB	$119/168

FAX/MODEMS

Zoltrix 14.4K V.32bis, V.42bis I/E	$85/138
US Robotics Sportster 14.4K I/E	$88/108
US Robotics Courier Series	$Call
14.4 Fax/Modem	$45
Hayes Optima 28.8 V. Ext	$435
USR Sportster 28.8 Int/Ext	$216/236

CONTROLLERS

IDE 2FD/2HD with 2S/1P/1G	$10
IDE with I/O for VESA Local Bus	$16
Enhanced I/O (2S/1P) w/ 16550 UART Chip	$24
IDE I/O (2S/1P) w/ 16550 UART Chip	$30
VLB IDE I/O (2S/1P) w/ 16550 UART Chip	$34
Adaptec 1522	$69
1542CF(SCSI)	$164
1542CFK w/ Kit(SCSI)	$226
2742T EISA (Twin SCSI)	$226
2842 VLB SCSI	$198
2940 PCI	$192
DTC 2290 EISA IDE	$108
DTC 2280 ISA IDE	$14
DTC 2278 VLB IDE	$20
Promise DC-200 IDE Cache controller	$84
Promise DC-420 VLB w/512K Cache	$92
Promise DC-4030 VLB IDE Cache Controllerf	$95

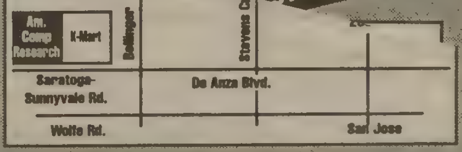
Terms and Conditions

1. One year parts and lifetime labor warranty on systems.
2. Prices reflect cash discount.
3. Prices and availability subject to change w/o notice.
4. Shipping, insurance and COD charges are exta and non-refundable.
5. Return shipping must be insured, prepaid and bearing an RMA# on the shipping label.
6. Defective items replaced or repaired at our discretion.
7. Not responsible for typos.
8. All returns subject to 20% restocking fee.
9. Purchase orders are welcome and subject to approval.
10. No surcharge for checks.

PC UPGRADES WELCOME

American Compute
Research, Inc.
Phone: 408-257-8998
Fax: 408-257-9158
1001 South Saratoga Sunnyvale Rd., San Jose, CA 95129
Hours: 9:00 to 6:00 Mon-Fri
10:00 to 12:00 Sat

CALL FOR SYSTEMS



I have only one criticism of the program. Freelance for Windows, which I regularly use to create charts, lets me create multiple org charts for a single project; each chart is a separate screen, but they can be saved and printed together. This can be done in CLEAR OrgCharts, but only in an awkward and roundabout way. However, this is not enough to keep me from using this program. (CLEAR Software Corp, 385 Elliot St., Newton, MA 02164. 916/965-5019)

Educational Software Reviews

Shoot Video Like a Pro

Published By: Zelos Digital Learning
For: Mac or Windows
List Price: $49.95
Reviewed By: Pamela Mason

If you own a camcorder and want to learn more about how to get the right lighting, composition, and sound in your videos, Shoot Video Like a Pro offers a great beginner's overview of the professional basics. It covers everything from zooms, pans, and camera moves to choosing the right microphone.

In the Lighting section you enter a virtual studio where you can interactively change literally hundreds of light settings and apply them to a video shoot. I particularly like the simple line drawing animation of the scene (similar to a blueprint) that they show you before a video clip. This is a very powerful tool for conceptualizing a shot. It helps break down a scene compositionally into blocks or basic design elements, removing the clutter of all the real-world details, which helps you to learn how to "see" and plan the best possible shot.

There are tips on shooting weddings and how to make smooth transitions between shots instead of just making jerky "jump cuts." Also featured are tips for shooting sporting events, like sailing, and how to shoot portraiture video. This is a great learning tool with a nicely designed, clearly navigable interface. Save yourself countless hours of wasted footage by learning to shoot video like a pro. (Zelos Digital Learning. 1-800-345-6777)

LESSONS
TESTS
INFORMATION

Multimedia Typing Instructor

Multimedia Typing Instructor

Published By: Individual Software, Inc
For: Mac or Windows PC
List Pri—y: Pamela Mason

Move over Mavis Beacon—there's a new typing kid on the block! Designed for the beginner, the hunt-and-peck typist, and for improving the speed and accuracy of the experienced typist, this is a typing CD-ROM with a decidedly different feel. It is a thoroughly engaging travel adventure that combines all the elements of multimedia—graphics, animation, video, and

continued on page 254

MAY 20th, 95 PARKING LOT BIG PC SALE !!
MANY GIVE AWAYS: OUT OF OUR MIND PRICE !
BUY & SELL (TRADE) Saturday 9am - 4pm
CELEBRATING OUR 10TH YEAR OF BUSINESS!
HARD to FIND PARTS-- GOOD USED DEALS
All Prices Reflect Cash Discount.
All prices and availability subject to change W/O notice
OPEN 9AM to 6PM MON - FRI
GO SHARKS!

5000 items Memory CD-ROM Sound card Modems
9 to 21 inch Svga Monitors PC clones even Pentiums
used Equipment and New . Blow out Sales

VIDEO CARDS & MONITORS
DIAMOND 64 SVGA 124
DIAM VIPER SE 2MB 273
MATROX 4MB SVGA $583
VLB 16 M.COLOR.$73
EGA/CGA CARD..$35/17
KODAK / FUJISTSU PARTS
MONO CARD........$ 8
PRINCETON 15" 17" MONITOR
VIEWSONIC 20"..............$1265
15" SVGA MONITOR MITEC 285.0
100 WATT MEDIA SPEAKERS.................$ 82
SONY 2X SPEED CD ROM IDE..............$109
SOUNDBLASTER 16 MULTI CD..............$ 86
M/S NATURAL ERGONOMIC KEYBOARD...$ 92
MICROSOFT MICE (ROUGH & SMOOTH)......$25
HANSCANNER 34

HARD DRIVES!
105 MB QUANTUM.. ....$ 98 00
MAXTOR 1.2 GB ....$ 365 00
850MB MAXTOR DRIVE 235.00
420 MB..... IDE..........$ 167.00
540 IDE QUANTUM 180.00
40MB 80MB IDE DRIVES 48/88.00

TOSHIBA CD ROM -- SCSI -- DS -- $ 146 .00
286 SYSTEMS - 60 PIECES ALL MUST GO

9" VGA IBM CORP $105 CUTE
14.4 FAX/MODEM $49.90
ADAPTEC ...2940...PCI.....$192
BUSLOGIC SCSI VLB...$165
ADVANTSYS..VLB...SCSI..$199
PCI CONTROLLERS / IDE./ESDI/MFM/SCSI
RLL/AT/XT CONTROLLERS....BEAT ANY PRICE

MOTHER BOARDS
PENTIUM M\B ONLY, PCI , 90 MHZ $172.0
486 / DLC , 33 MHZ , TI CPU!! $56 00
486 / DX / DX2 M\B 256K cache..VLB . . . $79 5
486/ SLC2 / 66 MHZ w/ math VLB . . . $123
486 DX4-100 AMD main BOARD & CPU. . $255.00
486 DX4 100 /80 MHZ PCI MAIN BOARD. 115.00
486 SLC2-66 IBM MAIN BOARD BEAT ANY 125 00
486 DX-100/80 MAIN BOARD 72/30 PIN green. 88
1 MEG SIMMS - $35.00 256K SIMM $ 10 00
16 MEG SIMMS $440.00 4 MB SIMM $125 00
4 MEG - BEAT ANY 72 OR 30 PINS!! . 141.00
INTEL CPU PULLER W \ BOX......WOW! ..$3.00

Palo Alto Micro
E-MAIL US
AMERICA
ON
LINE
AND
INTERNET
dpamc@aol.com

CPU'S & MATH - CO
486 dx2 /66 mhz ... $106
486drx2-60 /SR-2-60 156
pentium 90 mhz $534
8087/287 MATH ....$ 18
386DX CPU FROM $ 22
387-33 MATH-CO......$ 29
WE WILL BEAT ANY CPU PRICE!!
LIFETIME WARRANTY AVAILABLE!
HP SCANNER IIP $389.00

4 GB SCSI QUANTUM SCSI.$ 1193.0
1 GIG FAST SCSI II DR........$ 455.00

3483 EL CAMINO REAL
PALO ALTO, CA 94306
TEL:(415) - 493 - 8209
(415) - 493 - 7978
(415) - 493 - 8217
FAX:(415) - 493 - 4572

DOS 6.X $5.00 USED COLOR COMPAQ PORTABLE UNIT ETC
H.P. 310 NOTEBOOK PRINTER ---DESKJET-- $277.00
PANASONIC / EPSON / ALL PRINTRS....54PCS START 29.00
1.44 / 1.2 FLOPPIES ..(MITSUMI / TEAC) 27.5/41.00
HAVE CD TITLE X

EZCom-EZGo
Windows file transfer and remote file access utility
➩ Remote access to all your PC's files.
➩ Extremely easy to configure and use. Select the file(s) and the phone number. That's it.. recovery.
➩ Sends and receives files in the [illegible]plication simply by
➩ Transfers files usie entry in the receive log.
➩ Launche
r orders or information:
$30
For 2 copies
Dealer inquires welcome
Voice (415) 941-6209 FAX (415) 948-2098 E-Mail Ezcom@ix.netcom.com

COMPUTER UPGRADE SUPERMARKET

WE DIDN'T GET TO WHERE WE ARE BY PUSHING BOXES...

Our personal commitment to our corporate customers:

We've tailored our Corporate Sales Department to meet the very demanding needs of buyers and professionals of Corporate America. How you look depends on how well the suppliers you've chosen perform. We offer you a clear choice over the competition: ***Here is why...***

FOR THE SERVICE:

- •Fast account approval and setup. Pre-approved accounts for all Fortune 1000 companies, Government Branches, Universitites and Educational Institutions.
- •Hassle-free ordering (just ask for corporate sales department).
- •Professional and knowledgeable sales staff.
- •Same day pickup at our Will Call Window, with no waiting.
- •Same day shipping/delivery available.
- •Direct swap of RMAs on most items within the warranty period.
- •Our R&D facility is designed to produce the highest quality systems and sub-systems, one or one thousand.
- •Personal service tailored to each corporate account by your own inside customer service representative.

FOR THE PRICE:

- •We offer the most competitive prices in the industry.
- •Local support and service at mail-order prices.
- •Special discount on most items reserved only to open accounts.
- •For our corporate customers, we offer special programs that allow discounts to their employees.

FOR THE SELECTION:

- •We offer more options in memory storage devices (ie hard disk drives, CD Roms, tape backups,...etc.) than any other store nationwide.
- •Full line of high-end video displays and cards.
- •High quality systems and sub-systems customized to your needs and specifications.

FOR THE REPUTATION:

- •NCA is a local, national and worldwide supplier of the highest quality brand name computer products.
- •Well over 30% of the Fortune 1000 companies and hundreds of Government and Educational Institutions around the country trust their business to NCA.
- •NCA's proven record of expansion is the result of superior service and commitment to our customers.

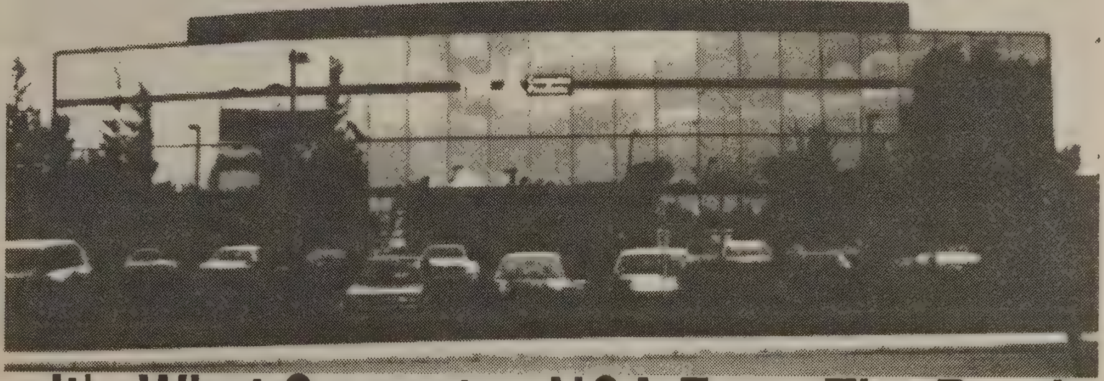
NCA CARES℠

OUR PERSONAL COMMITMENT TO CUSTOMER SATISFACTION

Comments, Suggestions, Ideas, Questions?

1-800-TELL-NCA

Service And Product Selection Is Our Personal Commitment



It's What Seperates NCA From The Rest!

NCA CORPORATE ADVANTAGE

The Largest Selection Of Hard Drives And Memory Storage Devices Worldwide

The Best Brand Name Computer Products In The Industry

Express Advantage Program Available

Corporate Leasing Available

The Most Competitive Prices Nationwide

Unparalleled Service And Commitment To Customer Satisfaction

HARD DRIVES • CD-ROMS • TAPE BACKUPS • MULTIMEDIA • VIDEO CARDS • MONITORS • COMPUTER SYSTEMS • MEMORY • CONTROLLER CARDS • PRINTERS • AND MUCH MORE...

NCA CORPORATE™

Dedicated to serving Purchasing Agents Worldwide.

1-800-961-1200

LOCAL (408) 522-8672 FAX P.O.s (408) 739-2420

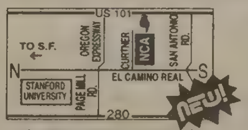
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

Sale Ends 05/28/95

AMERICAN EXPRESS VISA PURCHASE ORDERS

PRICE SUBJECT TO CHANGE WITHOUT NOTICE LIMITED STOCK ON SPECIAL ITEMS NOT RESPONSIBLE FOR TYPE OR ERRORS

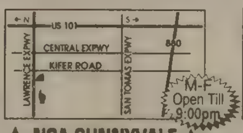


▲ NCA PALO ALTO ▲

3825 El CAMINO REAL (Curtner & El Camino)

Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm

(415) 493-2444 Fax (415)-493-2480

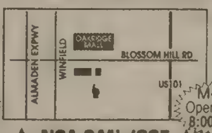


▲ NCA SUNNYVALE ▲

1202 KIFER RD. (Lawrence Expway & Kifer)

Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm

(408) 739-9010 Fax (408) 739-2420

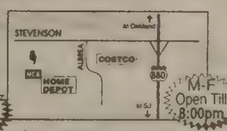


▲ NCA SAN JOSE ▲

962 Blossom Hill Rd. (Across Oakridge Mall)

Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm

(408) 363-4600 Fax (408) 363-4610



▲ NCA FREMONT ▲

40521 Albrae St. (Next to HOME DEPOT)

Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm

(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE

Corporate, Dealer, Government, Educational, & International:

(408) 522-8672

P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

①

* "LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

MULTIMEDIA SYSTEMS

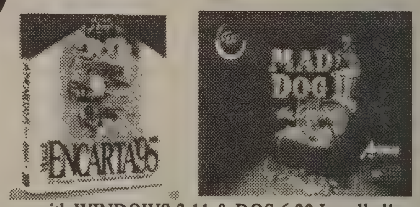
INTRODUCING:
NCA's High Quality

MULTIMEDIA Tower Computer Systems

featuring

Quad-Speed CD-ROM Drive & FREE:

Complete With 16- Bit Sound Card

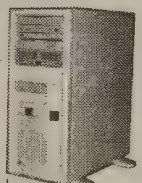

ENCARTA 95
MAD DOG II

with WINDOWS 3.11 & DOS 6.22 Installed!

NCA's High Quality *Alexis Q90*

Pentium Tower 90Mhz PCI/VLB

1.2GB/8MB RAM-256K Cache (exp. to 1MB)
Quad-Speed Multimedia Computer



- Intel P90 CPU
- Aquaris P90 PCI/VLB 256K cache exp. to 1MB
- 8MB RAM exp. to 128MB
- IDE Super I/O
- Mitsumi 1.44MB floppy drive
- NCA's 9-Bay case
- 101 Keyboard
- Hercules Stingray 1MB PCI Video Card
- Maxtor 1260A-1.2GB Hard Drive
- Internal Quad-Speed CD-ROM Drive
- High Quality 16-bit sound card
- Labtec stereo speakers
- Microsoft Encarta '95 CD-ROM Title
- Mad Dog II CD-ROM title

Comes with MS DOS & Windows installed!

Monitor not included

Encarta '95 & Mad Dog II CD-ROM Titles Included FREE!

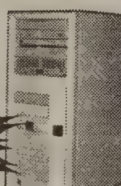
$2049

intel inside pentium
MITSUMI Hercules Maxtor MICROSOFT WINDOWS Labtec

NCA's High Quality *Alexis Q100*

486DX4/100 Tower VLB

540MB/4MB RAM-128K Cache
Quad-Speed Multimedia Computer



- AMD DX4/100 CPU
- NCA's 486 VLB-128K Cache
- 4MB RAM
- IDE Super I/O
- Mitsumi 3.5" floppy drive
- Mini tower case
- 101 keyboard
- Mitac VLB 1MB Video Card
- Quantum MV540A-540MB IDE Hard Drive
- Internal Quad-Speed CD-ROM Drive
- High Quality 16-bit sound card
- Labtec stereo speakers
- Microsoft Encarta '95 CD-ROM Title
- Mad Dog II CD-ROM title

Comes with MS DOS & Windows Installed!

Monitor not included

Encarta '95 & Mad Dog II CD-ROM Titles Included FREE!

$1199

with Intel 486 DX4/100 add.........$99

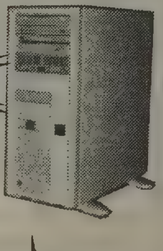
Quantum™ MITAC MICROSOFT WINDOWS MITSUMI Labtec

NCA's High Quality *Alexis Q66*

486DX2/66 Tower PCI

540MB/4MB RAM-128K Cache
Quad-Speed Multimedia Computer

Based on NCA's High Quality *PCI MotherBoard*



- Intel DX2/66 CPU
- NCA's 486 3-PCI-128K
- 4MB RAM
- IDE Super I/O
- Mitsumi 3.5" floppy drive
- Mini tower case
- 101 keyboard
- PCI 1MB Video Card
- Quantum MV540A-540MB IDE Hard Drive
- Internal Quad-Speed CD-ROM Drive
- High Quality 16-bit sound card
- Labtec stereo speakers
- Microsoft Encarta '95 CD-ROM
- Mad Dog II CD-ROM title

Comes with MS DOS & Windows installed!

Monitor not included

Encarta '95 & Mad Dog II CD-ROM Titles Included FREE!

$1149

intel inside Quantum™ MICROSOFT WINDOWS MITSUMI Labtec

NCA Computer Products™

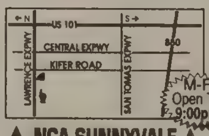
Your Computer Upgrade SUPERMARKET™

Sale Ends 05/28/95

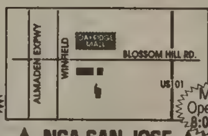
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

US 101
TO S.F.
N
S
OREGON EXPRESSWAY
CURTNER
NCA
SAN ANTONIO RD.
EL CAMINO REAL
STANFORD UNIVERSITY
PAGE MILL RD.
280
NEW!

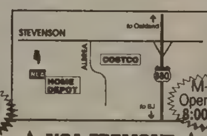
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480


N
US 101
S
CENTRAL EXPWY
KIFER ROAD
LAWRENCE EXPWY
SAN TOMAS EXPWY
880
M-F Open Till 9:00pm

▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420


ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD.
US 101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610


STEVENSON
to Oakland
ALBRAE
COSTCO
NCA
HOME DEPOT
880
to SJ
M-F Open Till 8:00pm

▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA
CORPORATE
Corporate, Dealer, Government,
Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

②

CT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS

"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

HIGH QUALITY COMPUTER SYSTEMS

Customize to your needs......

Featuring:

ALEXIS M *Series*

Quality Computer Systems Built using:

MYLEX TEAC

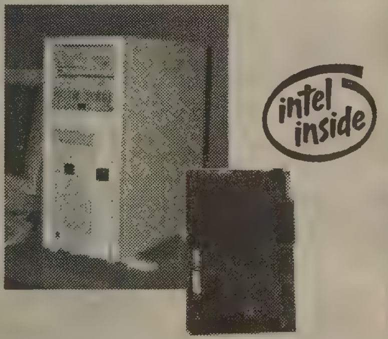
intel inside MITSUMI intel inside pentium PROCESSOR

energy EPA POLLUTION PREVENTER

MYLEX

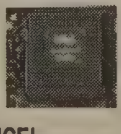
High Performance Motherboards
The Ultimate in Reliability & Quality

ALEXIS 4M



486DX/2-66MHZ/VLB TOWER SYSTEM

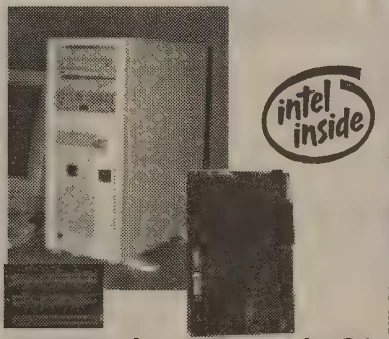
- Intel DX2/66MHz CPU
- 1 ISA 8-Bit/2VESA Local Bus Slots
- 256K Cache exp. to 512K
- 0MB exp. to 64MB DRAM
- Award BIOS
- Controller Card
- SIS Chip Set
- ZIF Socket
- Uses 4x30 Pin SIMMS or 2x72 Pin SIMMS
- Green PC Energy Star Compliant
- Teac 1.44 or 1.2MB floppy drives
- Heat sink for CPU
- Mitsumi high quality keyboard
- NCA's special 9-bay tower case
- 250W UL power supply



NEW LOWER PRICE!

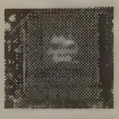
$459.95

ALEXIS 4M-2



486DX/2-66MHZ/PCI & VLB TOWER SYSTEM

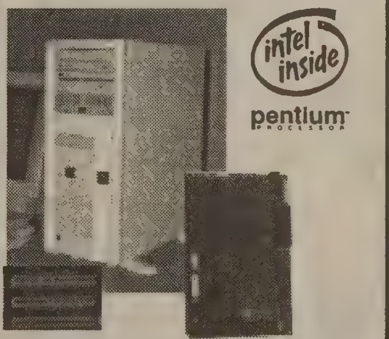
- Intel DX2/66MHz CPU
- 3 PCI Slots
- 4 ISA 16-Bit/1 ISA 8-Bit
- 2 VESA Local Bus Slots
- 256K Cache exp. to 512K
- 0MB exp. to 128MB DRAM
- AMI BIOS
- ALI Chip Set
- ZIF Socket
- Controller Card
- Uses 72 Pin SIMMS
- Green PC Energy Star Compliant
- Teac 1.44 or 1.2MB floppy drives
- Mitsumi high quality keyboard
- NCA's special 9-bay tower case
- 250W UL power supply



NEW LOWER PRICE!

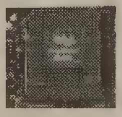
$519.95

ALEXIS 7M



PENTIUM 75MHZ/PCI SUPER TOWER SYSTEM

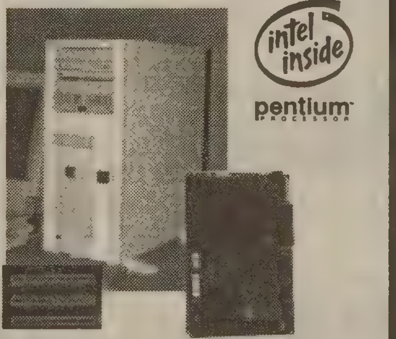
- Intel Pentium 75MHz CPU
- 3PCI Bus Master Slots
- 5 ISA 16-Bit slots
- 256K Cache exp. to 1MB
- 0MB exp. to 192MB
- AMI Bios
- OPTI Chip Set
- ZIF Socket
- Uses 72 Pin SIMMS
- Green PC Energy Star Compliant
- Teac 1.44 or 1.2MB floppy drives
- Mitsumi high quality keyboard
- NCA's special 9-bay tower case
- 250W UL power supply



NEW LOWER PRICE!

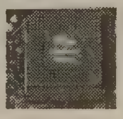
$789.95

ALEXIS 9M



PENTIUM 90MHZ/PCI TOWER SYSTEM

- Intel Pentium 90MHz CPU
- 3PCI Bus Master Slots
- 5 ISA 16-Bit slots
- 256K Cache exp. to 1MB
- 0MB exp. to 192MB
- AMI Bios
- OPTI Chip Set
- ZIF Socket
- Uses 72 Pin SIMMS
- Green PC Energy Star Compliant
- Teac 1.44 or 1.2MB floppy drives
- Mitsumi high quality keyboard
- NCA's special 9-bay tower case
- 250W UL power supply



NEW LOWER PRICE!

$959.95

NCA Computer Products™

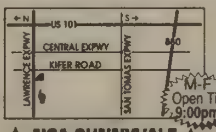
Your Computer Upgrade SUPERMARKET™

Sale Ends 05/28/95

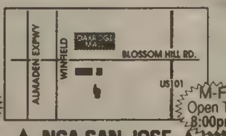
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

US 101
TO S.F.
OREGON EXPRESSWAY
CURTNER
NCA
SAN ANTONIO RD.
N
S
STANFORD UNIVERSITY
PAGE MILL RD.
EL CAMINO REAL
280
NEW!

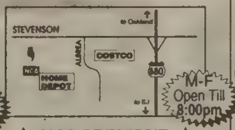
▲ **NCA PALO ALTO** ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480


← N
US 101
S →
CENTRAL EXPWY
KIFER ROAD
LAWRENCE EXPWY
SAN TOMAS EXPWY
880
M-F Open Till 9:00pm

▲ **NCA SUNNYVALE** ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420


ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD.
US 101
M-F Open Till 8:00pm

▲ **NCA SAN JOSE** ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610


STEVENSON
to Oakland
ALBREA
COSTCO
NCA
HOME DEPOT
880
to SJ
M-F Open Till 8:00pm

▲ **NCA FREMONT** ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

③

*LOWEST PRICE GUARANTEE offer applies only to items which are in stock at an authoized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified a

HARD DRIVES

Maxtor®

546MB IDE 3.5"x1"

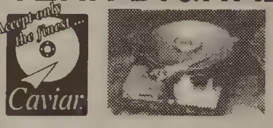
- 7546A
- 12ms
- 256K Cache
- 2 Yr. Warranty

$185⁹⁵

IDE

425MBIDE .... 7425AV, 14ms, 2Yr. Warr.	$159⁹⁵
540MBIDE .... 7540AV, 12ms, 2 Yr. Warr.	$175⁹⁵
850MBIDE .... 7850A, 12ms, 2Yr. Warr.	$233⁹⁵
1.0GBIDE.......... 71050A, 12ms, 2 Yr. Warr.	$337⁹⁵
1.2GBIDE.......... 71260A, 12ms, 2 Yr. Warr.	$355⁹⁵

WESTERN DIGITAL


Accept only the finest
Caviar

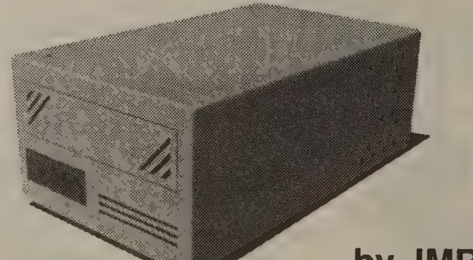
420MB IDE 13MS. MODEL#WD2420, 3Yr. Warr.	$177⁹⁵
540MB IDE 12MS. MODEL#WD2540, 3Yr. Warr.	$217⁹⁵
730MB IDE 12MS. MODEL#WD2700, 3Yr. Warr.	$233⁹⁵
850MB IDE 10MS. MODEL#AC2850, 3Yr. Warr.	$255⁹⁵
1.0GB IDE 10MS. MODEL#WD3100A, 3Yr. Warr.	$355⁹⁵
1.2GB IDE 11MS. MODEL#WD31200A, 128K Cache	$365⁹⁵

QUALITY EXTERNAL SCSI CASE

For MAC, SUN, NeXT, and IBM Compatibles

- ▶ High Quality Metal Cases
- ▶ 2 Centronics Output
- ▶ Noise-Free Fan
- ▶ External SCSI ID Switch
- ▶ Power Cable & Hardware
- ▶ Fully Tested & Approved
- ▶ Universal Power Supply 110/220V

See Page 7



by JMR

IBM®

Largest Capacity Hard Drive Ever!

1.0GB IDE "SPIT FIRE" 3.5"X1"

- 8.5ms access time
- 512K CACHE

NEW!

INTERNAL $375⁹⁵

1.0GB IDE, 10.5ms..............................$365.95
1.0GB SCSI, 10.5ms, 5400 RPM, 3 yr. warr Int./Ext... $509⁹⁵/$619⁹⁵

2.0GB FAST SCSI-II, 3.5", 9.2ms................$1029⁹⁵

4GB Fast SCSI-II

5.25" FORMAT: CONTAINS TWO 3.5" HDAS

ADDRESSABLE AS ONE LUN

- ▶ Data Stripping Across Two Actuators
- ▶ 1MB Multi-Segmented, Dual Port Data Buffer
- ▶ <10ms Read Access Time
- ▶ 5400RPM
- ▶ Up to 20MB/Sec Transfer Rate (sync)
- ▶ 375,000 hous MTBF
- ▶ 5Yr. Warr.

$1888⁹⁵

External $1998⁹⁵

CONNER®

IDE

425MB IDE......... 14ms, CFS425A Low Profile 3.5"x1"	$159⁹⁵
540MB IDE......... 14ms, CFS540A 64K Cache	$175⁹⁵
850MB IDE......... Fast, CFA850A Low Profile 3.5"x1"	$235⁹⁵
1.2GB IDE........... 12ms, 256K, 3.5"x1", CFA1275A	$365⁹⁵
1.2GB IDE........... 15ms, 64K, CFS1275A	$345⁹⁵

SCSI

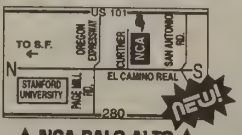
	INTERNAL	EXTERNAL
1.0GB SCSI............. CFP1080S, 256K, 10ms, 3.5"x1"	$469⁹⁵	........$579⁹⁵
1.0GB SCSI............. CP1080W, 9.5ms Fast Wide	$549⁹⁵	........$659⁹⁵
2.14GB SCSI........... CFP2105S, 5400RPM, 8.5ms	$844⁹⁵	......$954⁹⁵
2.14GB SCSI........... CFP2107S, 7200RPM, 8.5ms	$925⁹⁵	......$1035⁹⁵
4.2GB SCSI............. CFP4207F, 7200RPM, 8.5ms	$1395⁹⁵	......$1505⁹⁵

NCA Computer Products™

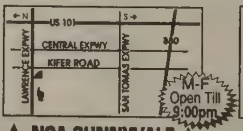
Your Computer Upgrade SUPERMARKET™

Sale Ends 05/28/95

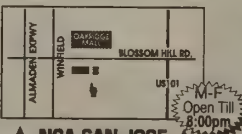
DISCOVER | AMERICAN EXPRESS | MasterCard | VISA | PURCHASE ORDERS


US 101
TO S.F.
OREGON EXPRESSWAY
CURTNER
NCA
SAN ANTONIO RD.
N
S
EL CAMINO REAL
STANFORD UNIVERSITY
PAGE MILL RD.
280
NEW!

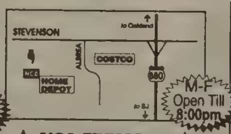
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480


N
US 101
S
CENTRAL EXPWY
KIFER ROAD
LAWRENCE EXPWY
SAN TOMAS EXPWY
880
M-F Open Till 9:00pm

▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420


ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD.
US 101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610


STEVENSON
to Oakland
ALBREA
COSTCO
NCA
HOME DEPOT
880
to SJ
M-F Open Till 8:00pm

▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

LOWEST PRICE GUARANTEE offer applies only to items which are in stock at an authoized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantitiy offers, or on bonus or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

HARD DRIVES

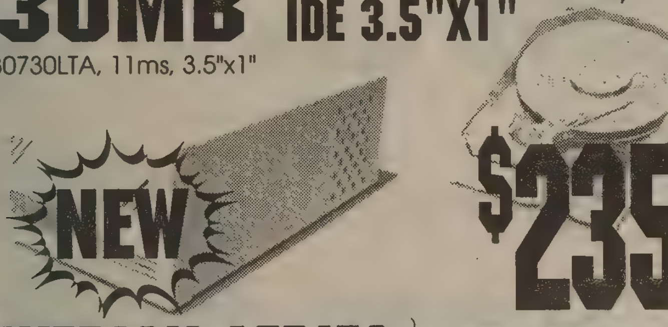
Quantum®

Specify Quantum, Specify Quality

Lowest Price Guaranteed*

730MB IDE 3.5"X1"

QM30730LTA, 11ms, 3.5"x1"



$235.95

MAVERICK SERIES

CAPACITY	M/N	SPEED	SIZE	PRICE
540MB IDE	QM30540MVA	14MS	3.5"X1"	$192.95
540MB SCSI	QM30540MVS	14MS	3.5"X1"	$199.95

LIGHTENING SERIES®

CAPACITY	M/N	SPEED	SIZE	PRICE
540MB IDE	QM30540LTA	11MS	3.5"X1"	$205.95
540MB SCSI	QM30540LTS	11MS	3.5"X1"	$212.95
730MB IDE	QM30730LTA	11MS	3.5"X1"	$235.95
730MB SCSI	QM30730LTS	11MS	3.5"X1"	$266.95

DAYTONA SERIES® 2.5"

CAPACITY	M/N	SPEED	SIZE	PRICE
256MB IDE	QM20256DYA	12ms	2.5"	$253.95
514MB IDE	QM20514DYA	12MS	2.5"	$429.95
256MB SCSI	QM20256DYS	12MS	2.5"	$259.95
514MB SCSI	QM20514DYS	12MS	2.5"	$469.95

BRAND NEW WITH A TWO YEAR FACTORY WARRANTY • FIVE YEARS ON PD SERIES ONE YEAR ON 2.5" DRIVES

SCSI

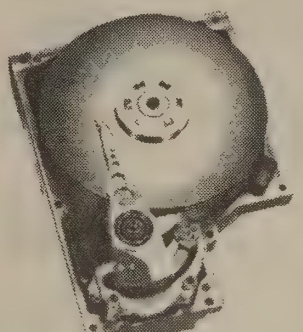
CAPACITY	M/N	CACHE	SPEED	SIZE	INTERNAL	EXTERNAL
2.1GB	XP32150S	1024	8.5MS	3.5"	$887.95	$997.95
2.1GB	321515GPS	512K	8.5MS	3.5"	$1075.95	$1185.95
4.2GB	Q34301GPS		8.5MS	3.5"	$2179.95	$2289.95

▶ FACTORY NEW WITH FULL FACTORY WARRANTY

Seagate

BARRACUDA SERIES

Lowest Price Guaranteed*



BARRACUDA II / 2.1GB

ST32550N

- ▶ 3.5", 8ms
- ▶ 7200RPM
- ▶ Fast SCSI-II
- ▶ 500,000MTBF

INTERNAL $997.95

EXTERNAL $1107.95

BARRACUDA IV/ 4.1GB

ST15150N

- ▶ 3.5", 8ms
- ▶ 7200RPM
- ▶ Fast SCSI-II
- ▶ 500,000MTBF

INTERNAL $1422.95

EXTERNAL $1532.95

ST12450W 1.7GB Fast Wide SCSI-III....$1489.95

IDE

CAPACITY	M/N	CACHE	SPEED	SIZE	PRICE
730MB	ST3780A	256K	FAST	3.5"X1"	$225.95
850MB	ST5850	256K	11MS	3.5"X1"	$255.95
1.08GB	ST31220	Enhanced IDE	12MS	3.5"X1"	$355.95
130MB	ST9145AG	64K	16MS	2.5" NOTEBOOK	$235.95
209MB	ST9235AG	64K	16MS	2.5" NOTEBOOK	$269.95
340MB	ST9385AG	64K	16MS	2.5"NOTEBOOK	$289.95
455MB	ST9550AG	64K	16MS	2.5" NOTEBOOK	$382.95
524MB	ST9655AG	64K	16MS	2.5"NOTEBOOK	$439.95

SCSI

CAPACITY	M/N	CACHE	SPEED	SIZE	INTERNAL	EXTERNAL
1.05GB	ST31230N		10.5MS	3.5"X1"	$525.95	$635.95
1.05GB	ST31230W		10.5MS	3.5"X1"	$639.95	$749.95
2.1GB	ST32430N		10.5MS	3.5"	$875.95	$985.95
2.1GB	ST32550N	1024K	8MS	3.5"X1"	$997.95	$1107.95
4.1GB	ST15150N	7200RPM	8MS	3.5"	$1422.95	$1532.95
4.3GB	ST15230N	7200RPM	8MS	3.5"	$1245.95	$1355.95
9.0GB	ST410800N	1024K	10MS	5.25"	$2989.95	$3099.95

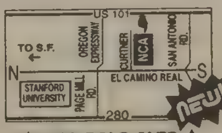
Seagate and the Seagate logo are registered trademarksof Seagate Technology Inc.

NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

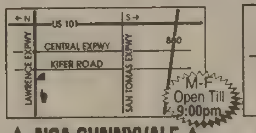
Sale Ends 05/28/95

DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS


US 101
TO S.F.
OREGON EXPRESSWAY
CURTNER
NCA
SAN ANTONIO RD.
N
S
STANFORD UNIVERSITY
PAGE MILL RD.
EL CAMINO REAL
280
NEW!

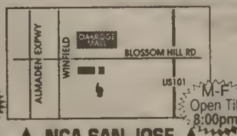
▲ NCA PALO ALTO ▲

3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480


N
US 101
S
CENTRAL EXPWY
KIFER ROAD
LAWRENCE EXPWY
SAN TOMAS EXPWY
880
M-F Open Till 9:00pm

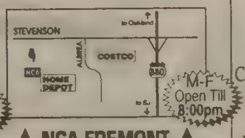
▲ NCA SUNNYVALE ▲

1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420


ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD
US101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲

962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610


STEVENSON
to Oakland
ALBRAE
COSTCO
NCA
HOME DEPOT
880
to S.J.
M-F Open Till 8:00pm

▲ NCA FREMONT ▲

40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE

Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

*LOWEST PRICE GUARANTEE offer applies only to items which are in stock at an authoized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classifi

5

HARD DRIVES

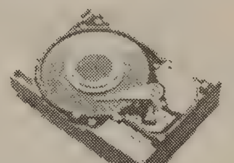
MICROPOLIS

5 YEAR WARRANTY

1.75GB 3.5"X1" FAST SCSI-II

Novell Labs Tested & Approved

- MC2217
- 10ms Seek Time
- 5400RPM
- 3.5"



$799.95

EXTERNAL...$909.95

3.0GB INTERNAL SCSI-II

Lowest Price Guaranteed*

- MC1936
- 11ms Seek Time
- 5400RPM
- FH

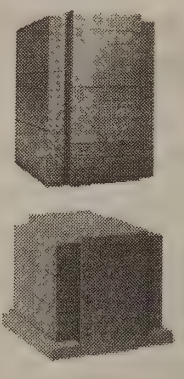
$799.95

EXTERNAL...$909.95

SCSI

	MODEL	RPM	SPEED	SIZE	INTERNAL	EXTERNAL
1.75GB	MC2217S	5400	10ms	3.5"	$799.95	$909.95
1.75GB	MC2217AV	Audio/Video			$955.95	$1065.95
2.0GB	MC4221	5400	8.5ms	3.5"	$975.95	$1085.95
2.0GB	MC4221AV	Audio/Video			$1088.95	$1198.95
3.0GB	MC1936	5400	11ms	FH	$799.95	$909.95
3.0GB	MC1936AV	Audio/Video			$1339.95	$1449.95
4.0GB	MC3243S	7200	8.5ms	3.5"	$1375.95	$1485.95
4.0GB	MC3243AV				$1449.95	$1559.95
9.1GB	MC1991	5400	10ms	5.25"	$2259.95	$2369.95
9.1GB	MC1991AV	Audio/Video			$2355.95	$2465.95

RAIDION™



Fault-Tolerant Disk Arrays

Call for Best Prices

MICRODISK®

Stackable External Subsystems

FUJITSU®

Novell Labs Tested & Approved

Lowest Price Guaranteed*

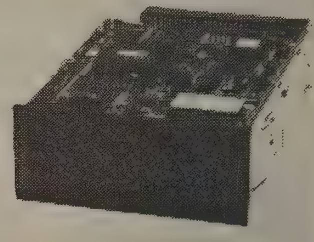
LOWEST NCA PRICES EVER

1.0GB SCSI-II 3.5"

M1606

NEU!

- 3.5" HH Drive
- 10ms Seek Time
- 512K Read/Write Cache(SCSI)
- 3-Year Warranty



$529.95

IDE

CAPACITY	M/N	CACHE	SPEED	SIZE	PRICE
530MB	M2684TAU	256K	12ms	3.5"x1"	$185.95

SCSI

CAPACITY	M/N	CACHE	SPEED	SIZE	INTERNAL	EXTERNAL
530MB	M2684SAU	256K	12ms	3.5"x1"	210.95	$320.95
1.0GB	M1606	NEU!	10ms	512K	$529.95	$639.95

HEWLETT PACKARD

High Quality Hard Drives

2.1GB 3.5" FAST SCSI-II

- HP C2490SE
- 8.5ms Seek Time
- 500,000RPM
- 5-Yr. Warr.
- 57 Mbits/s Trans. Rate
- Up to 10Megabytes/s (synchronous)

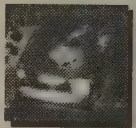
$985.95

EXTERNAL....$1095.95

1.05GB 3.5" SCSI-II

Formatted Capacity

- HP C3323SE
- 9.5ms Seek Time
- 5400RPM
- 500K MTBF
- 5-Yr. Warr.
- Up to 24 Mbits/s Trans. Rate
- Up to 10 Mbytes/s Trans. Rate (synchronous)



$515.95

EXTERNAL..$625.95

1.2GB HP 37245 $565.95 EXTERNAL..$675.95

NCA Computer Products™

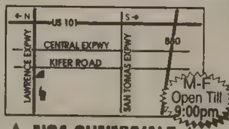
Your Computer Upgrade SUPERMARKET™

Sale Ends 05/28/95

DISCOVER · AMERICAN EXPRESS · MasterCard · VISA · PURCHASE ORDERS

US 101
TO S.F.
N
S
OREGON EXPRESSWAY
CURTNER
NCA
SAN ANTONIO RD.
EL CAMINO REAL
STANFORD UNIVERSITY
PAGE MILL RD.
280
NEU!

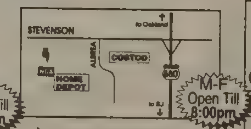
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480


N
US 101
S
CENTRAL EXPWY
KIFER ROAD
LAWRENCE EXPWY
SAN TOMAS EXPWY
880
M-F Open Till 9:00pm

▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expwy & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420

ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD.
US 101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610


STEVENSON
to Oakland
AUDRA
COSTCO
NCA
HOME DEPOT
880
to SJ
M-F Open Till 8:00pm

▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

(6)

*LOWEST PRICE GUARANTEE offer applies only to items which are in stock at an authoized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantitiy offers, or on bonus or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

EXTERNAL SUBSYSTEMS

NCA's High Quality ***Barracuda Series***

EXTERNAL SCSI DEVICES

for PC, MAC, SUN, & SILICON GRAPHICS

by JMR

- High Quality External Cases.
- Noise-Free Fan
- Top Manufacturers Quality SCSI Devices
- Universal Power Supply 110/220V
- 2 External Centronics Connectors
- Selectable SCSI ID.
- External Termination / includes a terminator
- SCSI Cable (Cent50-Cent50 or Cent50 to DB25)
- Power Cable
- Fully Tested and Approved
- Mac Formatting and Caching Software (upon request)
- External PC Kits Available

"ONE STOP" SuperSource for Virtually Every SCSI Drive Made today.

NCA's

Barracuda I

External 3.5" Fixed SCSI Disk Drives

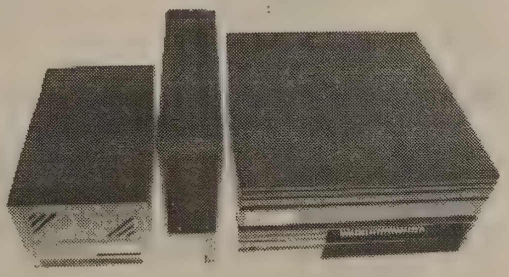
SIZE Formatted	Int. Drive	SPEED	WARRANTY	PRICE
530Mb	Fujitsu	12ms	2Yr	$\$320^{95}$
540Mb	Quantum Maverick	14ms	2Yr	$\$309^{95}$
540Mb	Quantum Lightening	11ms	2Yr	$\$322^{95}$
730Mb	Quantum Lightening	11ms	2Yr	$\$376^{95}$
1.0Gb	Conner	<10ms	1Yr	$\$579^{95}$
1.0Gb	Conner	FAST WIDE	1Yr	$\$659^{95}$
1.0Gb	IBM	10.5ms	3Yr	$\$619^{95}$
1.0Gb	Fujitsu	10ms	3Yr	$\$639^{95}$
1.05Gb	HP 2490SE	10.5ms	5Yr	$\$625^{95}$
1.05Gb	Seagate	10.5ms	5Yr	$\$635^{95}$
1.2Gb	HP37245S	9.5ms	5Yr	$\$675^{95}$
1.75Gb	Micropolis	10ms	5Yr	$\$909^{95}$
2.0Gb	Micropolis	8.5ms	5Yr	$\$1085^{95}$
2.0Gb	IBM	8.6ms	5Yr	$\$1139^{95}$
2.14Gb	Conner	8.5ms	5400rpm	$\$954^{95}$
2.14Gb	Conner	8.5ms	7200rpm	$\$1035^{95}$
2.1Gb	Seagate 32550N	9ms	5Yr	$\$1107^{95}$
2.1Gb	Seagate 32430N	10.5ms	5Yr	$\$985^{95}$
2.1Gb	HP	8.9ms	5Yr	$\$1095^{95}$
2.1Gb	Quantum XP32150S	8.5ms	5Yr	$\$997^{95}$
4.0Gb	Micropolis	8.5ms	5Yr	$\$1485^{95}$
4.1Gb	Seagate Barracuda	8ms	5Yr	$\$1532^{95}$
4.2Gb	Quantum	8.5ms	5Yr	$\$2289^{95}$
4.2Gb	Conner	8.5ms	7200rpm	$\$1505^{95}$
4.3Gb	Seagate Hawk	8ms	5Yr	$\$1355^{95}$

NCA's

Barracuda II

External FH Fixed SCSI Disk Drives

SIZE Formatted	Int. Drive	SPEED	WARRANTY	PRICE
3.0Gb	Micropolis 1936	11ms	5Yr	$\$909^{95}$
4.0Gb	IBM	11ms	5Yr	$\$1998^{95}$
9.0Gb	Seagate	11.5ms	5Yr	$\$3099^{95}$
9.1Gb	Micropolis	10ms	5Yr	$\$2369^{95}$



plus: 100's of customized combos and options available

Quality Built SCSI Sub-Systems Since 1988

NCA's

Barracuda III

External Non-Fixed SCSI Devices

SCSI BACKUP:

SIZE(UPTO)	MAKE	MODEL	TYPE	PRICE
250Mb	WangTek	5150ES	1/4"	$\$405^{95}$
250Mb	Connor Viper	2150S	1/4"	$\$395^{95}$
525Mb	Conner Viper	2525S	1/4"	$\$558^{95}$
525Mb	WangTek	E5525S	1/4"	$\$529^{95}$
1.3Gb	Connor Viper	2750	1/4"	$\$899^{95}$
1.5Gb	Exabyte	FS1G		$\$828^{95}$
2.5Gb	Exabyte	EXB8205	8mm	$\$1585^{95}$
5.0Gb	Exabyte	EXB8505	8mm	$\$2099^{95}$
2.0Gb	HP	35470	4mm	$\$825^{95}$
2.0Gb	Connor Python	4320NT	4mm	$\$899^{95}$
2.0Gb	WangDat	3100	4mm	$\$829^{95}$
4.0Gb	Connor Python	4324	4mm	$\$935^{95}$
5.0Gb	Exabyte	EXB4200C	4mm	$\$899^{95}$
2-4.0Gb	HP	35480	4mm	$\$945^{95}$
4-8.0Gb	WangDat	3200	4mm	$\$869^{95}$
4-8.0Gb	WangDat	3400Dx	4mm	$\$1094^{95}$
4-8.0Gb	HP	C1533A	4mm	$\$1115^{95}$

MAC Backup Software	*add $\$ 69^{95}$*
NovaBack for PC or WIN	*add $\$ 29^{95}/\$59^{95}$*
Novell NLM Unlimited user	*add $\$339^{95}$*

EXTERNAL SCSI CD ROMs:

MAKE	MODEL	ACCESS	TRANSFER	PRICE
TOSHIBA	3601B	150ms	600Kb	$\$409^{95}$
NEC	3Xp	240ms	450kb	$\$379^{95}$
NEC	4Xe	220ms	600kb	$\$469^{95}$
Plextor	SIX-Speed	••NEW••	900kb	$\$639^{95}$
Plextor	Quad-Speed	1MB CACHE	600kb	$\$485^{95}$
Plextor	Quad-Speed	256 CACHE	600kb	$\$425^{95}$
PIONEER	604X	300ms	612Kb	$\$769^{95}$
PIONEER	1804	300ms	614Kb	$\$1779^{95}$
Backpack	DOUBLE-SPEED	250ms	300kb	$\$299^{95}$
Backpack	QUAD-SPEED	300ms	600kb	$\$335^{95}$

Also Available:
External OPTICAL & Removable Cartridges by:
Syquest, Bernoulli, Maxoptix, Fujitsu, Ricoh

NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

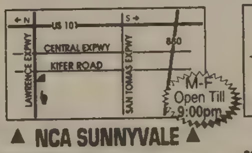
Sale Ends 05/28/95

DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

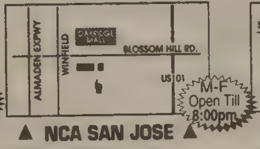
PRICE SUBJECT TO CHANGE WITHOUT NOTICE LIMITED STOCK ON SPECIAL ITEMS NOT RESPONSIBLE FOR TYPE OR ERRORS

US 101
TO S.F.
OREGON EXPRESSWAY
CURTNER
NCA
SAN ANTONIO RD.
N
S
EL CAMINO REAL
STANFORD UNIVERSITY
PAGE MILL RD.
280
NEW!

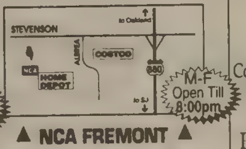
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

⑦

* "LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

TAPE BACK-UPS

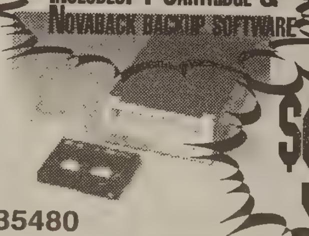
HEWLETT PACKARD

The most reliable SCSI Tape Backups for MAC, PC or SUN

4GB *External* 4mm 3.5" SCSI DAT TAPE BACKUP

- •732 Kbytes/Sec Transfer Rate (Sustained)
- • 5 MB/ Sec (Synchronous)

INCLUDES: 1 CARTRIDGE & NOVABACK BACKUP SOFTWARE



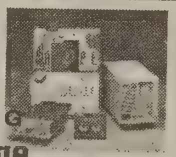
$989.95

35480

SCSI 4mm DAT

CAPACITY	MODEL	INTERNAL	EXTERNAL
2.0GB	35470 DAT	$758.95	$825.95
2-4GB	35480 DAT	$855.95	$945.95
4-8GB	C1533A	$1015.95	$1115.95
HP Mounting Bracket for DAT tape drive			$35.95

EXABYTE®



FS1G

1.5 GB SCSI Tape Storage

COMPLETE SYTEM INCLUDES:

- •Internal FS1G Tape Drive
- •Adaptec 16-Bit SCSI Controller Card
- •File Secure Software
- •Up to 30 MB/Min. Transfer Rate
- •One Data Cartridge

$688.95

External FS1G Kit...$828.95
Internal Unit (2501) $485.95

4mm DAT Cartridge

CAPACITY	MODEL	INTERNAL	EXTERNAL
5GB	EXB-4200C w/software	$799.95	$899.95

2.5 GB 8mm DAT Subsystem

CAPACITY	MODEL	INTERNAL	EXTERNAL
2.5GB	EXB-8205	$1297.95	$1585.95

5 GB 8mm DAT Subsystem

CAPACITY	MODEL	INTERNAL	EXTERNAL
5.0GB	EXB-8505	$1999.95	$2099.95

CONNER *The BEST name in SCSI Back-up Drives*

SOF•STOR

for IBM Compatibles, MAC, SUN, & NeXT

SCSI

Formerly ARCHIVE

VIPER™

- ◆ 6MB/MIN
- ◆ SCSI
- ◆ 1/4" TAPE UNIT

- ◆ 36MB/MIN
- ◆ SCSI-2
- ◆ 1/4" TAPE UNIT

1.3GB 2750
INTERNAL...$789.95
EXTERNAL..$899.95

250 MB 2150S
INTERNAL...$310.95
EXTERNAL $395.95
Int. W/Software $385.95

525 MB 2525S
INTERNAL...$448.95
EXTERNAL..$558.95
Int. W/Software $539.95

SCSI 4mm DAT Tape Backups

◆ 11MB/MIN.

2 GB. 4320 NT
INTERNAL....$795.95
EXTERNAL...$899.95

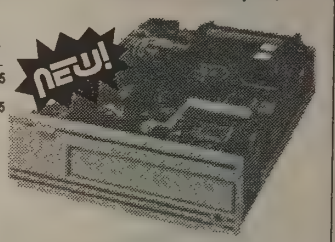
PYTHON™

◆ 1MB Cache Buffer

4 GB. 4324 TURBO
INTERNAL..............$825.95
EXTERNAL..............$935.95

4-8GB. 4352XP
INTERNAL .$1069.95
EXTERNAL $1179.95

NEW!



COLORADO MEMORY SYSTEMS INC.

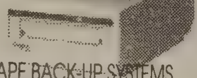
Uses 2120 Tapes

RUNS OFF FLOPPY PORT

CAPACITY	MODEL/TYPE	INTERNAL
250MB	DJ20 JUMBO250	$124.95
350MB	DJ30 JUMBO350	$159.95
680MB	DJ25 JUMBO700	$245.95

350MB UPGRADE KIT (FROM 250MB TO 350MB)	**$49.95**
EXTERNAL KIT WITH CARD AND CABLES KE-10	$109.95
EXTERNAL TAPE PORT AB-11	$35.95
FC-10 TAPE CONTROLLER, WITH CABLES	$78.95
TC-15 HIGH PERFORMANCE 16-BIT CONTROLLER	$168.95

Trakker



PARALLEL PRINTER PORT EXTERNAL TAPE BACK-UP SYSTEMS

RUNS OFF PARALLEL PRINTER PORT

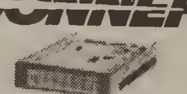
CAPACITY	MODEL/TYPE	EXTERNAL
250MB	TRAKKER 250	$259.95
350MB	TRAKKER 350	$335.95
680MB	TRAKKER 700	$385.95

POWER TAPES 4MM DAT TAPE BACKUPS

••INCLUDES SCSI CONTROLLER CARD••

CAPACITY	MODEL/TYPE	INTERNAL	EXTERNAL
1.0GB	PT-10	$585.95	$689.95
2.0GB	PT-25	$925.95	$1055.95
4.0GB	PT-60	$1115.95	$1299.95

CONNER TAPE•STOR TAPE BACKUP



CAPACITY	MODEL/TYPE	INTERNAL	EXTERNAL
420MB	420FBE	$165.95	$315.95
850MB	850RFBE	$262.95	$395.95
4.0GB	4000RFBC	$525.95	N/A

WangDAT™

Internal

4-8GB $989.95

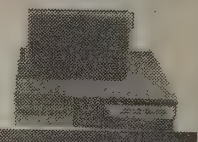
3400DX DAT Tape Backup

External $1094.95

SCSI 4mm DAT

CAPACITY	MODEL	INTERNAL	EXTERNAL
2.0GB	3100 DAT	$719.95	$829.95
4-8GB	3200 DAT	$759.95	$869.95

WANGTEK



SCSI Tape

CAPACITY	MODEL	INTERNAL	EXTERNAL
250MB	5150S	$315.95	$405.95
525MB	5525S	$439.95	$529.95

MicroSolutions backpack

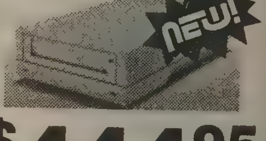
Computer Products

Tape Drive

900MB Parallel Port External Tape Backup

- ▶ Speeds up to 9mb/min.
- ▶ QIC 3010 format, reads QIC-40 & 80 tapes
- ▶ Supports high speed EPP & 1284 ports
- ▶ Window and DOS Software Included
- ▶ 2 Year Warranty

NEW!



$444.95

250/430MB Parallel Port External Tape Backup

QIC 80 uses 2120 tapes
Software for unattended backups
Twice as fast as internal floppy drive
Window and DOS Software Included
2 Year Warranty

$275.95

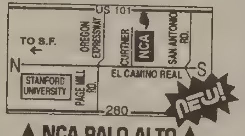
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

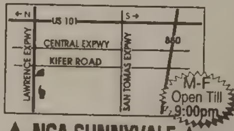
Sale Ends 05/28/95

DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

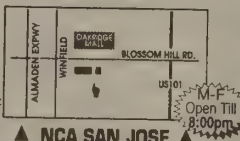
SUBJECT TO CHANGE WITHOUT NOTICE LIMITED STOCK ON SPECIAL ITEMS NOT RESPONSIBLE FOR TYPE OR ERRORS



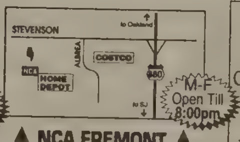
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

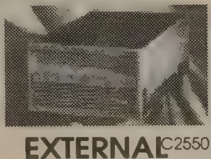
⑧

"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

REMOVABLES
OPTICALS

HEWLETT PACKARD

1.3GB Multifunction Rewritable & WORM Drive



- ▶HP C1716T
- ▶SCSI-2 1.3GB

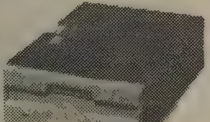
INTERNAL $1955^95

EXTERNAL C2550 WITH CARTRIDGE $2299^95

1.3GB Cartridge........................$104^95

RICOH

128MBYTE, 3.5" SCSI-II REWRITABLE OPTICAL



INTERNAL $489^95

EXTERNAL WITH CARTRIDGE $589^95

- ▶3000 RPM
- ▶256K Cache
- ▶Approx. 40ms

1.3GB, 5.25" SCSI-II REWRITABLE OPTICAL

- ▶R05061
- ▶MO DRIVE
- ▶35ms

NEW! INTERNAL $1689^95

INTERNAL CD-RECORDER

- ▶F21010
- ▶SCSI-II
- ▶5.25"

NEW! $2357^95

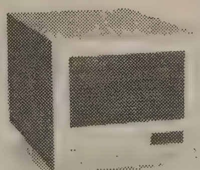
MEDIA

63 MINUTE CD	$45.95
74 MINUTE CD	$55.95

Multifunction Magento-Optical Disk Drive for 1-Gbyte and 650-Mbyte Rewritable and WORM Disk Cartridges, With up to 4-Mbytes Read/Write cache

Maxoptix™

1GB CART. glass/poly $179



- ▶ Unlimited Data Storage
- ▶ External SCSI Subsystem
- ▶ One Year Factory Warranty
- ▶ 25-Year Life Of Glass Media
- ▶ Embedded SCSI/SCSI-2
- ▶ Data Transfer of up to 13.2Mbits/Sec.
- ▶ Ultimate Back-up For NOVELL (Ready-to-boot Backup)

TAHITI IIIM - Multifunction
- ▶ 1MB Read/Wirte Cache
- ▶ 1.3GB Optical

$1974^95

External Optical/1MB Cache....$2159^95

TAHITI IIIM - Multifunction
- ▶ 4MB Read/Wirte Cache
- ▶ 1.3GB Optical

$2145^95

External Optical/4MB Cache....$2345^95

FUJITSU

NEW!

230MB Rewritable, Removable Optical SCSI Drives

External SCSI 230MB, 3.5" Rewritable Optical

- •External optical drive
- •Using 2512 internal
- •Includes 1 cartridge
- •Fast seek time
- •3600RPM
- •256K Cache
- •Software for MAC(free upon request)

$725^95

Internal 230MB, 3.5" Rewritable Optical

- •Bare optical drive
- •2512
- •Low Profile, Only 1"
- •3600RPM
- •256K Cache
- •Fast Seek Time

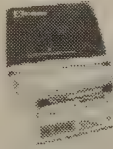
NEW! $549^95

REMOVABLES

SyQuest

270MB SYQUEST REMOVABLE

External SCSI Drive
- •External 270MB 3.5" SCSI Removable Cartridge Drive
- •Unlimited Storage Capacity
- •270MB External Drive
- •Cables & Software for MAC
- •13.5ms Seek Time
- •Includes one cartridge



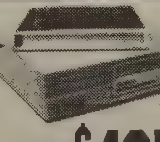
$465^95

Internal Bare IDE Drive ....$329^95

Internal Bare SCSI Drive.........$338^95

200MB SYQUEST REMOVABLE

NEW!



External 200MB Drive
- 200MB Cartridge
- Cables
- Installation Software (for MAC)
- PC Software Included With Controller Purchase

$495^95

Internal SCSI Bare Drive ....$355^95

88MB C SYQUEST REMOVABLE

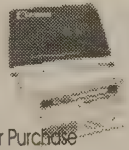
External 88MB C Drive
- 88MB Cartridge
- Cables
- Reads & Write Both 44 & 88 MB
- Installation Software (for MAC)
- PC Software Included With Controller Purchase

$368^95

Internal Bare Drive ....$239^95

105MB 3.5" SYQUEST REMOVABLE

External SCSI 105MB Drive
- 14ms Seek Time
- 105MB Cartridge
- Cables
- Installation Software (for MAC)
- PC Software Included With Controller Purchase



$368^95

Internal SCSI Bare Drive.........$229^95

Internal IDE Bare Drive ....$179^95

CAPACITY	SINGLE	5-PACK
44MB Cartridge (5.25")	$49^95	$235^95
88MB Cartridge (5.25")	$54^95	$264^95
105MB Cartridge (3.5")	$59^95	$289^95
200MB Cartrode (5.25")	$79^95	$389^95
270MB Cartridge (3.5")	$69^95	$339^95

TEAC

With bracket add $6

1.44MB 3.5"	$37^95
1.2MB 5.25"	$45^95
1.2/1.44MB Dual Drive	$91^95

MITSUMI

1.44MB 3.5"	$29^95
1.2MB 5.25"	$39^95

NCA Computer Products™

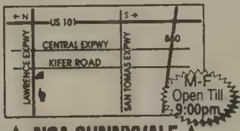
Your Computer Upgrade SUPERMARKET™

Sale Ends 05/28/95

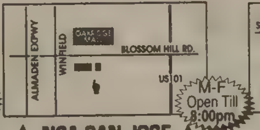
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

US 101
TO S.F.
OREGON EXPRESSWAY
CURTNER
NCA
SAN ANTONIO RD.
N
S
EL CAMINO REAL
STANFORD UNIVERSITY
PAGE MILL RD.
280
NEW!

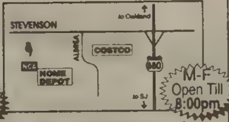
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

*LOWEST PRICE GUARANTEE offer applies only to items which are in stock at an authoized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantitiy offers, or on bonus or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-class

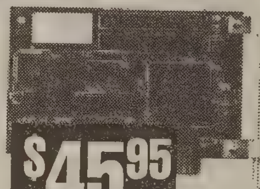
9

CONTROLLER CARDS

gsi™ GSI Enhanced IDE Accelerator Boards

GSI Model 11
8-Bit Four-Floppy & QIC-80 Tape Accelerator Board

- High-speed 1MB/sec. floppy interface (up to four floppy drives)
- Doubles the speed of 250MB (QIC-80) tape drives
- Fully supports 2.88MB floppy disk drives
- Supports "Media-Sensing" compatibilites of 2.88MB floppies
- Co-resides with other disk controller boards
- Perfect floppy or tape upgrade board



$\$45^{95}$

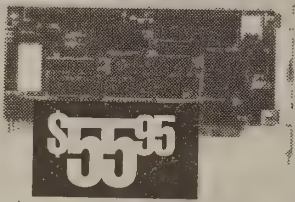
GSI Model 18 IDE FAST-ATA
16- Primary or Secondary IDE Accelerator Board

- 16-Bit ISA compliant with new enhanced IDE & fast ATA standards
- Supports two IDE drives
- Increases IDE hard drive data transfer rates up to 80%!
- Supports new high-capacity IDE hard drives
- Compatible with Windows, Novell NetWare, DOS & OS/2
- Tested and recommended by Micropolis, Fujitsu, Maxtor, Seagate, Western Digital, Quantum and Conner

$\$39^{95}$

GSI Model 21 IDE FAST-ATA
16-Bit IDE, Floppy & QIC-80 Tape Accelerator Board

- 16-Bit ISA compliant with new enhanced IDE & fast ATA standards
- Supports up to two IDE drives
- Increases IDE Data transfer rates up to 80%!
- Supports new high-capcity IDE hard drives
- High speed 1MB/sec. floppy interface(up to 4 floppy drives)
- Doubles the speed of the 250MB or 420MB (QIC-80) tape drives
- Fully supports 2.88MB floppy disk drives
- Compatible with Windows, Novell NetWare, DOS & OS/2



$\$55^{95}$

GSI Model 32 IDE FAST-ATA
16-Bit Multi-Port IDE, Floppy, Tape, & I/O Accelerator Board

- 16-Bit ISA compliant with new enhanced IDE & fast ATA standards
- Supports up to two IDE drives
- Increases IDE Data transfer rates up to 80%!
- Supports new high-capcity IDE hard drives
- High speed 1MB/sec. floppy interface(up to 4 floppy drives)
- Doubles the speed of the 250MB or 420MB (QIC-80) tape drives
- Dual 16550 UART serial ports & one bi-directional parallel port
- Compatible with Windows, Novell NetWare, DOS & OS/2

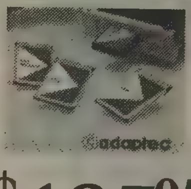
$\$109^{95}$

GSI Model 4C IDE FAST-ATA
16-Bit Four-Channel, Eight-IDE Accelerator Board

- 16-Bit ISA compliant with new enhanced IDE & fast ATA standards
- Supports up to eight IDE drives
- Increases IDE Data transfer rates up to 80%!
- Supports new high-capcity IDE hard drives
- No drivers needed
- Perfect for Novell mirroring or duplexing
- Compatible with Windows, Novell NetWare, DOS & OS/2

$\$110^{95}$

adaptec®



CardPark™

NEW!

Dual-slot ISA-to-PCMCIA Card Adapter for Desktop PCs

- AVA 4510 ISA-to-PCMCIA adapter
- Dual-slot, accepts two PCMCIA cards, hot-swap operation
- Type IV slot supports Types I, II, & III cards up to 15mm thick
- Compatible with SRAM, Flash, & ATA-Flash, Fax/modem, LAN, SCSI, Sound, GPS, and mass storage PCMCIA cards
- Includes CardPark software

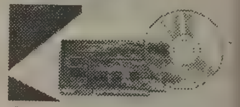
$\$185^{95}$

SCSI AudioMachine™

Experience the benefits of full SCSI with intergrated advanced audio.

- Features the AMM-1570 host adapter with full SCSI audio
- Includes full SCSI boot capability for high-capacity, high-performance drives
- Supports high-capacity removable SCSI devices
- Increases CD-ROM performance capabilitites with XA-Audio
- Ease of use provided by Adaptec EZ-SCSI™ & EZ-Audio™ intelligent installation software

$\$249^{95}$

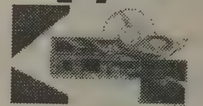


TotalCD™

16-Bit SCSI-2 host adapter for CD-ROM connectivity

- AVA 1505 ISA-to-SCSI-2 host adapter
- Adaptec EZ-SCSI lite software
- Up to 5MB/sec. synchronous on SCSI bus
- Advanced SCSI programming interface compliant, disconnect/reconnect, synchronous & asychronous data transfer

$\$47^{95}$

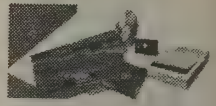


TotalConnect™

16-Bit host adapter for multiple SCSI-2 peripheral connectivity

- AVA 1515 ISA-to-SCSI host adapter with BIOS
- Connect up to 7 SCSI devices
- Adaptec EZ-SCSI lite software
- Up to 5MB/sec. synchronous on SCSI bus
- Advanced SCSI programming interface compliant, disconnect/reconnect, synchronous & asychronous data transfer

$\$84^{95}$

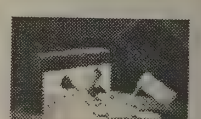


TotalAdvantage™VL

Complete 32-bit VL-to-Fast SCSI & VL-to-EIDE host adapter

- AVA-2825 VL-to-Fast SCSI & VL-to-EIDE (enhanced IDE)
- Connect up to 7 SCSI devices
- Up to 2 standard or enhanced IDE devices
- Up to 2 standard and 1 floppy tape drive
- Adaptec EZ-SCSI lite software
- Up to 5MB/sec. synchronous on SCSI bus
- Advanced SCSI programming interface compliant, disconnect/reconnect, synchronous & asychronous data transfer

$\$155^{95}$



SlimSCSI-II™ NEW RELEASE!

NEW!

Instant connection for portables to new peripherals, power & flexibility using the PCMCIA

- APA-1460 SlimSCSI-II host adapter
- Compatible with PCMCIA type II, type III & Toshiba type IV slots
- Fast 2MB/sec data transfer rate
- Convenient detachable 3-foot cable with reversible connector
- Low 0.5 watt power consumption for longer battery life
- Includes software for CD-ROM's, Phot CD's, SCSI hard drives, HP scanners, Magneto-optical, Syquest, Bernoulli, Floptical & SCSI tape drives.

$\$195^{95}$

MiniSCSI™Plus & EPP Adapters

A fast, easy way to connect SCSI devices to your portable or desktop PC's parallel port

- APA-348 MiniSCSI Plus & APA-358 MiniSCSI EPP
- Simple external plug-in, perfect for notebooks
- Convenient, intergrated 3-foot cable
- Complete software for easy installation and full SCSI peripheral device support
- Simultaneous use of parallel port with 100% transparent pass through
- MiniSCSI EPP model supports up to 1MB/sec. when used with enhanced parallel port.

SlimSCSI™EPP APA-358	$\$149^{95}$
SlimSCSI™Plus APA-348	$\$122^{95}$

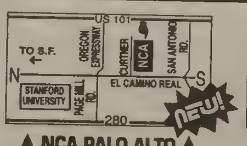
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

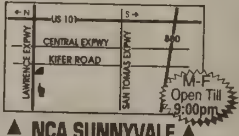
Sale Ends 05/28/95

DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

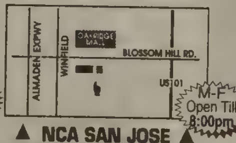
CE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS



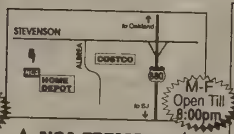
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

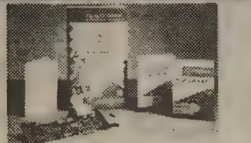
10

"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

CONTROLLERS

SCSI CONTROLLERS

adaptec®



SCSI CONTROLLERS

MODEL	DESCRIPTION	PRICE
1505	TOTAL CD 16-BIT SCSI-II	$\$47^{95}$
1522	16-BIT 7HD/2FD KIT	$\$135^{95}$
1542CF	BUS MASTER COMPLETE KIT	$\$235^{95}$
1640	MICROCHANNEL FOR PS/2, 7HD	$\$299^{95}$
1515	Total Connect ISA to SCSI host adapter w/ BIOS	$\$84^{95}$
2825VL	TOTAL ADVANTAGE VL	$\$155^{95}$
2742/W	Fast Wide SCSI EISA	$\$359^{95}/\$379^{95}$
2842A	Fast SCSI-II VESA	$\$239^{95}$
AHA-1460	Slim SCSI PCMCIA SCSI Card	$\$195^{95}$
AHA-2940	PCI SCSI MASTER RISC-BASED I/O	$\$279^{95}$
AHA-2940W	PCI FAST-WIDE SCSI	$\$359^{95}$
APA-358	SlimSCSI EPP	$\$149^{95}$
APA-348	SlimSCSI PLUS	$\$122^{95}$
EZ-SCSI	SOFTWARE	$\$65^{95}$
AVA-4510	Card Park Dual Slot ISA to PCMCIA adapter	$\$185^{95}$
AVA-1570	SCSI Audio Machine-full SCSI w/integrated audio	$\$249^{95}$

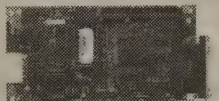
SEE PAGE 10 FOR NEW ADAPTEC PRODUCTS!

DATA TECHNOLOGY CORPORATION

IDE CONTROLLERS

MODEL	DESCRIPTION	PRICE
DTC3270VL	32-Bit VESA 7SCSI/2FD SCSI	$\$97^{95}$
DTC 3280AS	16-Bit ISA to SCSI Host Adapter	$\$174^{95}$
DTC3290AS	EISA to SCSI 32-Bit Host w/Cache	$\$338^{95}$
DTC3130	PCI 32-Bit PCI SCSI Bus Master	$\$75^{95}$
DTC3274VL	SCSI-II Bus Mastering	$\$184^{95}$

FUTURE® DOMAIN



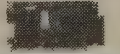
SCSI CONTROLLERS

MODEL	DESCRIPTION	PRICE
TMC850	8-BIT W/BIOS	$\$24^{95}$
TMC1680	SVP 16-BIT VALUE PACK 7HD/4FD	$\$119^{95}$
SCSI2GO	PCMCIA FAST SCSI-II TYPE II	$\$269^{95}$

TekRam **Enhanced IDE PCI**

MODEL	DESCRIPTION	PRICE
	Enhanced IDE PCI controller	$\$39^{95}$

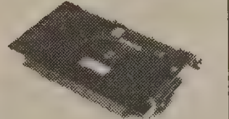
PROMISE TECHNOLOGY,INC.



SCSI CONTROLLERS

MODEL	DESCRIPTION	PRICE
DC-440	VLB SCSI-2 BUS MASTER w/IDE Interface	$\$178^{95}$

qlogic Corp.



FAST!SCSI EISA FL

Host Adapter Card for the EISA Bus $\$205^{95}$

- Patented 400 Series high-speed SCSI processor
- CorelSCSI for CD-ROM & HDD included FREE
- Uses a single 32-bit EISA slot
- Comprehensive software support
- 50-Pin internal SCSI cable with support for 3 devices provided
- Floppy connector supports 2 floppy drives
- Supports up to 7 SCSI devices

Host Adapter Card for the PCMCIA Bus .... $\$175^{95}$
Host Adapter Card for the VESA Local Bus FL .... $\$189^{95}$
Host Adapter Card for the ISA Bus FL .... $\$115^{95}$

FAST!SCSI PCI Basic

Host Adapter Card for the PCI Bus $\$115^{95}$

- High speed, single-chip SCSI processor
- Uses a single PCI slot
- SCAM level 2 upgrade
- Supports Fast SCSI-2 (10MB/sec.)
- Comprehensive software support
- CorelSCSI for CD-ROM & HDD software-FREE
- 50-pin high density external connector
- 50-pin internal connector including ribbon cable with support for 3 internal devices
- Supports up to 7 SCSI devices

FAST!SCSI IQ PCI

Host Adapter Card for the PCI Bus $\$299^{95}$

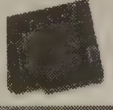
- Bus Master
- Uses a single PCI slot
- Fast(10MB/sec.) & Wide(20MB/sec)SCSI cabability
- High speed ISP1020 12 MIPS RISC SCSI processor
- Supports up to 15 SCSI devices

FAST!SCSI IQ PCI-10

Host Adapter Card for the PCIA Bus $\$199^{95}$

- 12 MIPS RISC SCSI processor
- Over 4000 512-byte block I/Os p.s.
- Uses a single PCI slot
- Supports Fast SCSI-2 (10MB/sec.)
- CorelSCSI for CD-ROM & HDD software-FREE
- 50-pin high-density internal connector, including ribbon cable with support for 3 internal devices

Acculogic



SCSI CONTROLLERS

MODEL	DESCRIPTION	PRICE
20	PCI SCSI Host Adapter, Sup. Wide SCSI-3	$\$219^{95}$
40	PCI SCSI Host Adapter, Corel SCSI Wide SCSI-3	$\$269^{95}$

ADVANSYS®

See Page 12

BUSLOGIC

SCSI CONTROLLERS

MODEL	DESCRIPTION	PRICE
KT545C	ISA Bus Master Fast SCSI Adapter Kit	$\$209^{95}$
KT445C	Bus Master Fast SCSI Kit for VL Bus	$\$195^{95}$
KT742A	EISA Bus Master SCSI-II Adapter Kit	$\$279^{95}$
KT747C	EISA Bus Master Fast SCSI	$\$299^{95}$
KT757C	FASTWIDE SCSI Card	$\$349^{95}$
KT946C	Bus Master Fast SCSI for PCI Local Bus	$\$259^{95}$

IDE CONTROLLERS

NCA'S STANDARD IDE

IDE CONTROLLERS

MODEL	DESCRIPTION	PRICE
211	2HD/2FD W/2 SERIAL, 1PAR, 1GAME	$23.95
NCL53	SMART CONT. W/BIOS EASY INSTALL	$49.95
223EH	**2HD/2FD for VESA LOCAL BUS 16550 I/O**	**$62.95**

BUSLOGIC

IDE CONTROLLERS

MODEL	DESCRIPTION	PRICE
KT510A	IDE Cache Contoller For PC/AT Sys.	$85.95
KT410A	IDE Cache Controller for VLB	$119.95
KT910A	IDE PCI Cache Controller	$165.95

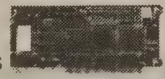
PROMISE TECHNOLOGY,INC.

IDE CACHING CONTROLLERS

IDE CONTROLLERS

MODEL	DESCRIPTION	PRICE
DC-200	ISA IDE 4HD/2FD 2.88MB Floppy support	$88.95
DC-420VLB	VESA IDE 512K Cache	$95.95
DC-4030-VL-2	VESA IDE 2.88MB support 4HD/2FD	$98.95
DC-200M	ISA IDE 512K Cache 4HD/2FD 2.88 Support	$93.95
DC2032	ISA Caching controller	$124.95
DC-2300+	E-IDE	$49.95

gsi™ Intelligent Accelerator/IDE Boards



IDE CONTROLLERS

MODEL	DESCRIPTION	PRICE
GSI 11	8-Bit 4FD/Tape Accelerator Board	$45.95
GSI 18	16-Bit 2 IDE Devices	$39.95
GSI 21	16-Bit 2FD/Tape Backup	$55.95
GSI 32	16-Bit Multi Port IDE/Tape & I/O	$109.95
GSI 4C	16-Bit 8-IDE Devices	$110.95

DATA TECHNOLOGY CORPORATION

IDE CONTROLLERS

DTC 2278d	VESA Multi I/O 2s/1p/1g Enhanced IDE	$24.95
DTC2177VL	VESA Caching IDE Controller	$104.95
DTC 2280	16-Bit Super I/O 2FD/2HD 2s/1p/1g	$19.95
DTC 2130d	PCI Local Bus host adapter	$24.95

WONDER 16550 IDE CARD

2 IDE DRIVES/2 FLOPPY
2 HIGH SPEED 16550 SERIAL PORTS
1 PARALLEL PORT / 1 GAME

$\$69^{95}$

16650 I/O Controller.....$45.95

PORT-FOLIO 16550

13-Port Super I/O Card

4 INTEGRATED NS16550 HIGH SPEED UARTs

- 2 IDE HD
- 4Floppy
- 2 Parallel
- 4 Serial
- 1 Game

$\$119^{95}$

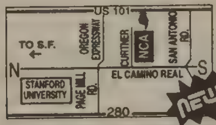
Flexport 42-6 Port.........$69.95

NCA **Computer Products**™

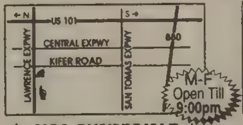
Your Computer Upgrade SUPERMARKET™

Sale Ends 05/28/95

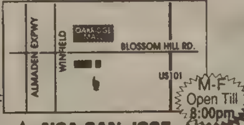
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS



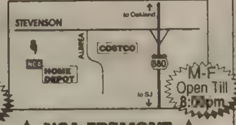
▲ **NCA PALO ALTO** ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480



▲ **NCA SUNNYVALE** ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420



▲ **NCA SAN JOSE** ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610



▲ **NCA FREMONT** ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call **(408) 522-3050**

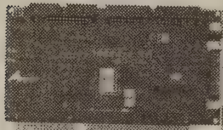
*LOWEST PRICE GUARANTEE offer applies only to items which are in stock at an authoized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantitiy offers, or on bonus or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classifie

HIGH QUALITY CONTROLLER CARDS

ADVANSYS®

Highest Performance In Any System

The central core of AdvanSCSI host adapters remains the same for all PCs. Custom logic is employed to provide optimum performance with each specific bus. The bus does make a difference; AdvanSCSI on one of the newer 32-bit buses (VESA or PCI) will outperform AdvanSCSI on the old 16-bit ISA standard. But thats's only relative. No matter what bus you use no other host adapter will outperform AdvanSCSI.

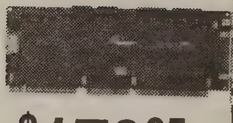


$139⁹⁵

ISA Bus Master

The ABP-542 provides AdvanSCSI technology for the ISA Bus. Supporting Plug and Play this host adapter has a 2.88 MB floppy controller, and both internal and external SCSI connectors.

- AdvanceWare automated installation in NON-Plug & Play systems
- No jumpers to set
- AdvanceWare menu driven configuration program
- DOS/Windows drivers-autoload program
- Second generation 32-Bit 50MHz RISC embedded processor
- High performance Scatter/Gather will support over 1700 segrams
- Limited lifetime warranty

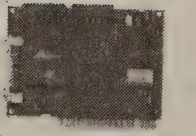


$179⁹⁵

VESA Bus Master

The ABP842 is the highest performance host adapter available on the VESA Local Bus. The host adapter has a 2.88 MB floppy controller, and both internal and external SCSI connectors. VESA burst mode supported at 120 MB/s.

- AdvanceWare automated installation in NON-Plug & Play systems
- No jumpers to set
- AdvanceWare menu driven configuration program
- DOS/Windows/OS/2 drivers-autoload program
- Second generation 32-Bit 50MHz RISC embedded processor
- Supports VL Burst Mode-up to 120mb/sec. transfer rate
- High performance Scatter/Gather will support over 1700 segrams
- Limited lifetime warranty



$145⁹⁵

PCI Bus Master

The ABP940 brings the advantages of the AdvanSCSI family to the new standard PCI Bus. This host adapter sets a new standard for the industry.

- No jumpers to set
- AdvanceWare menu driven configuration program
- DOS/Windows/OS/2 drivers-autoload program
- Second generation 32-Bit 50MHz RISC embedded processor
- Local memory architecture for highest performance
- High performance Scatter/Gather will support over 1700 segrams
- Supports PCI Burst Mode-up to 120MB/sec. transfer rate
- Limited lifetime warranty

Corel, Corel SCSI Version 2 & Corel Network Manager are trademarks of Corel Corporation. Novel is a registered trademark of Novell Inc. MS-DOS, Windows & Windows NT are trademarks of Microsoft Corporation. OS/2 is a trademark of IBM Corporation. All other trademarks used are owned by their respective owners.

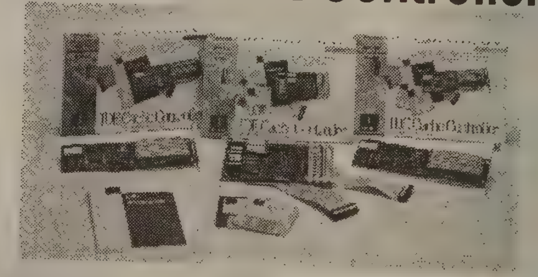
BUSLOGIC

Bus Master SCSI Accelerator Host Adapters

- Fast SCSI-2 data transfers of up to 10MB/second
- Fast & Wide SCSI-2 data transfers of up to 20MB/second
- Support for up to 7 or 15 (Wide) SCSI devices and dual floppy (not supported on PCI)
- Compatible with all major operating systems & SCSI peripherals
- Simple to install & configure using the AutoSCSI utility
- Includes award-winning CorelSCSI for CD-ROM

KT-545C	ISA	$209⁹⁵
KT-445C	VESA	$195⁹⁵
KT-747C	EISA	$299⁹⁵
KT757C	Wide EISA	$349⁹⁵
KT-946C	PCI	$259⁹⁵
KT-956C	Wide PCI	$314⁹⁵

IDE Disk Accelerators Outperform All Enhanced IDE Controllers



- Reduce average disk access time to as low as 0.3ms
- AutoIDE utility for ease of installation & configuration
- Cache expandability from 512KB to 16MB
- Disk mirroring support for 100% disk fault tolerance
- Attach up to 4 IDE drives, up to 4GB each
- Green Mode reduces power consumption

KT-510A	ISA	$85⁹⁵
KT-410A	VESA	$119⁹⁵
KT910A	EISA	$165⁹⁵

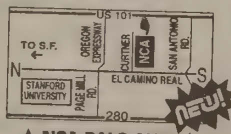
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

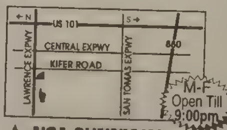
Sale Ends 05/28/95

PURCHASE ORDERS

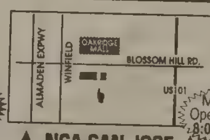
⑫ SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS



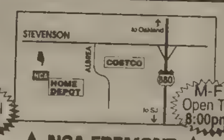
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE

Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

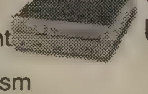
"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

CD ROM DRIVES

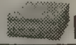
CHINON CD-535

SCSI Double-Speed CD-ROM Drive

- •256K buffer
- •Fast 220ms
- •300Kb/sec
- •Photo CD
- •MPC-2 compliant
- •Double doors
- •Sealed mechanism
- •Caddy & manual



$\$169^{95}$



External for Mac or PC..........$\$359^{95}$

TEAC SuperQuad 4X

CD-ROM Drive With Interface

NEW!

- •600 Kbytes/sec. transfer rate
- •195msec access time
- •Sound Blaster compatible

Includes:

CD-ROM Drive
Installation software
TEAC AT interface board
Mounting hardware
Installation manuals

$\$199^{95}$

TOSHIBA 3601B

NEW!

- ▶Caddyless
- ▶SCSI -II Fast Quad-Speed CD-ROM
- ▶150ms/600kb/sec
- ▶Multi-spin/Multi-speed
- ▶256K cache

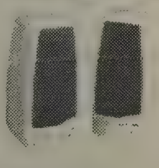
External..........$409.95

$\$299^{95}$

SPEAKERS

RECOTON

AMPLIFIED SHIELDED STEREO SPEAKERS

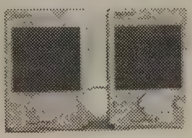


Includes AC Power Adapter
64555

$\$24^{95}$

Sheilded Stereo Speakers **By RECOTON ....** $9.95
64540

Labtec



CS 150 Amplified Speakers	$\$18^{95}$
CS 180 2.5" 90 DEGREE PIVOT........	$\$22^{95}$
CS 550 Amplified Speakers	$\$27^{95}$
CS 700 Amplified Speakers................	$\$28^{95}$
CS 800 Hi-Qualtiy Amplified Speakers .	$\$35^{95}$
CS 900 Amplified Speakers	$\$79^{95}$
CS1000 Under Monitor 5watt	$\$79^{95}$

ALTEC LANSING

COMPLETE LINE IN STOCK

Brainstorm

NEW!

QUAD-SPEED MULTIMEDIA KIT

- •Mitsumi Quad-Speed CD-ROM
- •Turtle Beach Monte Carlo sound card
- •Amplified stereo speakers
- •31 HOT CD-TITLES

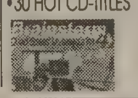
IDE

$\$294^{95}$

SCSI QUAD-SPEED MULTIMEDIA KIT

- •NEC SCSI Quad-Speed CD-ROM
- •Sound Blaster 16 SCSI-11 w/o ASP sound card
- •Labtec CS-180 speakers
- •30 HOT CD-TITLES

NEW!



$\$399^{95}$

MITSUMI 4X

IDE

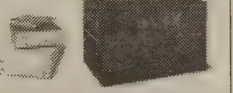
Quad-Speed CD-ROM Drive

- •Multisession Enhanced IDE
- •Software
- •Caddyless
- •600MB CD capacity
- •Can co-exist w/second AT CD-ROM

$\$185^{95}$

PLEXTOR

Formerly Texel



Six-Speed SCSI-II Internal CD-ROM Drive 6PLEX

- ▶ SCSI-II **SIX-SPEED**
- ▶ 900KB/Sec.
- ▶ 256K Buffer
- ▶ MPC Level 2
- ▶ 2 Yr. warranty

NEW!

$\$529^{95}$

NEW! **4Plex 256K cache.....$\$315^{95}$**
4Plex 1MB cache.....$\$375^{95}$

backpack MicroSolutions

CD-ROM Drive

Quad-Speed Parallel Port External CD-ROM Drive

- •No Slot plug-n-play
- •Motorized tray
- •Multisession Kodak Photo CD compatible
- •Ideal for Notebooks or Desktops
- •DOS OS/2 Device drivers
- •Supports new high speed EPP & IEEE 1284 ports

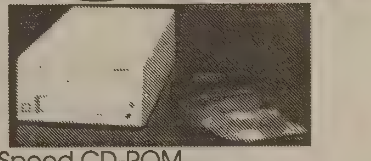
$\$335^{95}$

Double-Speed Parallel Port External CD-ROM Drive

- •250ms
- •300Kb/sec.
- •Double-Speed High Performance Drive
- •Ideal for Notebooks or Laptops
- •Supplied device drivers
- •Multi-Session Photo CD compatible

$\$299^{95}$

PIONEER®



- • High Speed CD-ROM
- • MiniChanger, featuring QUADRASPIN™
- ▶ External SCSI/SCSI-2 Subsystem
- ▶ **6-CD ROM Magazine**
- ▶ Software for MAC or IBM
- ▶ 300ms/ Fast 612Kb/Sec

DRM-604X

$\$700^{00}$

- ▶ External SCSI/SCSI-2 Subsys
- ▶ Up to 18-CD ROM di
- ▶ 3 (6-disc) magazine changer
- ▶ 300ms/Fast 614Kb/Sec

DRM-1804X

$\$1779^{95}$

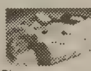
6-CD Magazine.............$27.95

NEC

MultiSpin 2V Deluxe

Double-Speed CD ROM Reader

- •300Kb/sec. CD-ROM reader
- •320ms access time
- •256k cache
- •XA ready
- •Multisession Photo CD
- •Includes Creative Labs 16-Bit sound card
- •Speakers & batteries
- •Software titles:Microsoft Encarta, Myst & Sim City

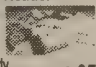


$\$279^{95}$

MultiSpin 3Xp Plus

Double-Speed CD ROM Reader

- •500Kb/sec. CD-ROM reader
- •240ms access time
- •256k cache
- •Full audio controls & XA ready
- •Multisession Photo CD
- •Complete with SCSI
interactive tuto

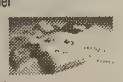


$\$379^{95}$

MultiSpin 2Vi

Double-Speed CD ROM Reader

- •300Kb/sec. CD-ROM reader
- •320ms access time
- •256k cache
- •XA ready
- •Multisession Photo CD
- •Includes CD-ROM interface, data cable & NEC Simple Start guide & video



$\$168^{95}$

MultiSpin 4Xi

Quad-Speed CD ROM Reader

- •600Kb/sec. CD-ROM reader
- •220ms access time
- •256k cache
- •Full audio & XA ready
- •Multisession (MMV), video CD playback
- •Complete with SCSI data cable & interactive tutorial CD

$\$369^{95}$

External 4Xe......$\$469^{95}$

CD ROM CADDIES

THE ORIGINAL CADDY DESIGN

$\$3^{95}$ Ea.

Audio Cables for most CD-ROMs & Sound Cards

$\$5^{95}$ Ea.

SunMoon Star

NEW!

Double-Speed Enhanced IDE CD-ROM Drive w/Card

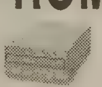
- •Sony 55e Enhanced IDE drive
- •250ms access time/300Kb ps
- •256K cache memory
- •High performance ATAPI
- •Supports Multi session Kodak Photo CD

$\$129^{95}$

Mountain. CD7 Minichanger

7 Disk CD-ROM Changer

- •300KB data transfer rate
- •380ms access time
- •SCSI-II interface
- •Integrated drive software
- •High performacne 2X drive
- •64K buffer
- •Changes disks in less than 5 seconds
- •1 year warranty, 48hr. replacement



$\$435^{95}$

Sony CDU-55E

- ▶ 250ms seek time
- ▶ Works w/any enhanced IDE controller
- ▶ Caddyless, MPC Level 2

IDE

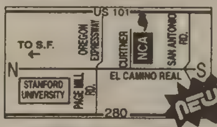
$\$99^{95}$

NCA Computer Products™

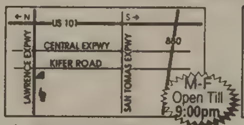
Your Computer Upgrade SUPERMARKET ™

Sale Ends 05/28/95

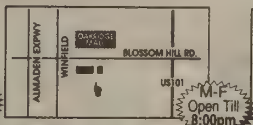
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS



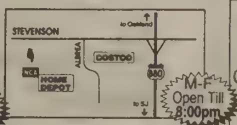
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE

Corporate, Dealer, Government,
Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

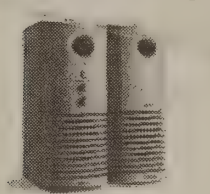
*LOWEST PRICE GUARANTEE offer applies only to items which are in stock at an authoized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classe ⑬

MULTIMEDIA

YAMAHA

YAMAHA POWERED MONITOR SPEAKERS

YST-M5

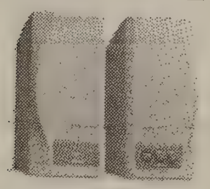


- 3 Watts per channel
- Video Shielded
- Active Servo Technology delivers Life-Like sound
- 90Hz-20KHz ± 3dB
- Includes AC Adapter

NEW LOWER PRICE!

$39⁹⁵

YST-M10



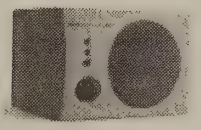
- 10 Watts per channel
- Video Shielded
- Active Servo Technology delivers Life-Like sound
- 80Hz-20KHz ± 3dB
- Includes AC Adapter
- 4 Star Rating "MACWorld April 1994"

NEW LOWER PRICE!

$77⁹⁵

YAMAHA POWERED SUBWOOFER

YST-MSW10



NEW LOWER PRICE!

$169⁹⁵

SPEAKER BUNDLES:

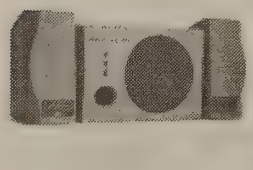
YST-SS510

YST-M5 SPEAKERS:
- 3 Watts per channel
- Video Shielded
- Active Servo Technology delivers Life-Like sound
- 90Hz-20KHz ± 3dB
- Includes AC Adapter

YST-MSW10 SUBWOOFER:
- 25 Watts
- Video Shielded
- Auto On/Off Sw...
- Active Servo Technology delivers Life-Like sound
- 35Hz-250KHz ± 10dB

NEW LOWER PRICE! **$175⁹⁵**

YST-SS1010



YST-M10 SPEAKERS:
- 10 Watts per channel
- Video Shielded
- Active Servo Technology delivers Life-Like sound
- 80Hz-20KHz ± 3dB
- Includes AC Adapter
- 4 Star Rating "MACWorld April 1994"

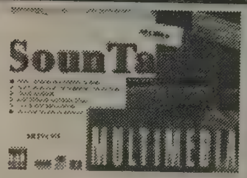
YST-MSW10 SUBWOOFER:
- 25 Watts
- Video Shielded
- Auto On/Off Switching
- Active Servo Technology delivers Life-Like sound
- 35Hz-250KHz ± 10dB

NEW LOWER PRICE!

$239⁹⁵

HiVal

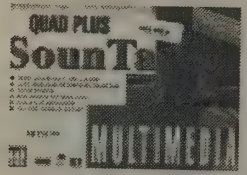
SCSI QUAD-SPEED MULTIMEDIA KIT



SCSI QUAD SOUNDTASTIC
- Sanyo SCSI Internal Drive
- 30 Software titles including: **Groliers '95, & DOOM**
- Audio & data cables

$239⁹⁵

QUAD-SPEED MULTIMEDIA KIT



QUAD-PLUS SOUNDTASTIC
- Mitsumi Enhanced IDE Drive
- SoundBlaster Vibra 16 Sound Card
- Labtec CS-180 Stereo Speakers
- CD-ROM Software including **Encarta '95**
- Manuals & cables

$295⁹⁵

DIAMOND
MULTIMEDIA

QUAD-SPEED MULTIMEDIA KIT

Diamond 4000 Upgrade Kit
- Internal Quad-speed CD-ROM Drive
- 16-Bit Wavetable Upgradable Sound Card
- Premium Stereo Speakers
- Includes 11 Hot CD Titles
- Quick start video for easy installation

$345⁹⁵

Diamond 1000 Double-Speed Upgrade Kit-Includes 30 Hot CD Titles	**$315.95**
Diamond 3000 Quad-Speed Upgrade Kit-Includes 6 Educational CD Titles	**$369.95**
Diamond 5000 Quad-Speed Upgrade Kit-Includes 30 Hot CD Titles	**$429.95**
Diamond 6000 Quad-Speed Upgrade Kit for Small Office/Home Office	**$378.95**

CREATIVE
CREATIVE LABS, INC.

Presenting the Complete PC Multimedia Solution

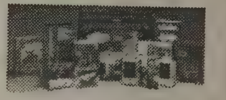
Sound BLASTER

GAME BLASTER CD 16™

Advanced Multimedia Upgrade Kit
- Game Blaster 16 Sound Card
- Double-Speed Internal Drive
- High Performance Speakers & Joystick
- Top Games Bundled CD-ROM Titles

$373⁹⁵

EDUTAINMENT CD 16™



Multimedia Upgrade Kit
- Sound Blaster 16-Bit Stereo Card
- Double-Speed Internal Drive
- CD-ROM Software Bundle Includes:

Software Toolworks Multimedia Encyclopedia, Lucasfilm Games, Simulations Sherlock Holmes Detective

$397⁹⁵

DISCOVERY CD 16™

Multimedia Upgrade Kit
- Sound Blaster 16-Bit Stereo Card
- Double-Speed Internal Drive
- Stereo Speakers
- Top Quality CD-ROM Software

$245⁹⁵

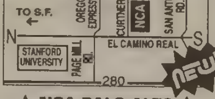
Sound Blaster Basic Value	
Sound Blaster Pro Value Edition	While Supplies Last $59.95
Sound Blaster 16 Basic Value Edition	$94.95
Sound Blaster 16 MultiCD/with ASP	$125.95/$165.95
Sound Blaster 16 SCSI-II/with ASP	$164.95/$191.95
Sound Blaster AWE32	$265.95

NCA Computer Products™

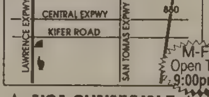
Your Computer Upgrade SUPERMARKET™

Sale Ends 05/28/95

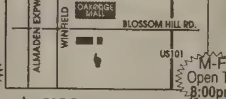
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS



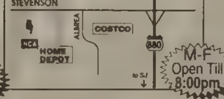
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

⑭ CE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS

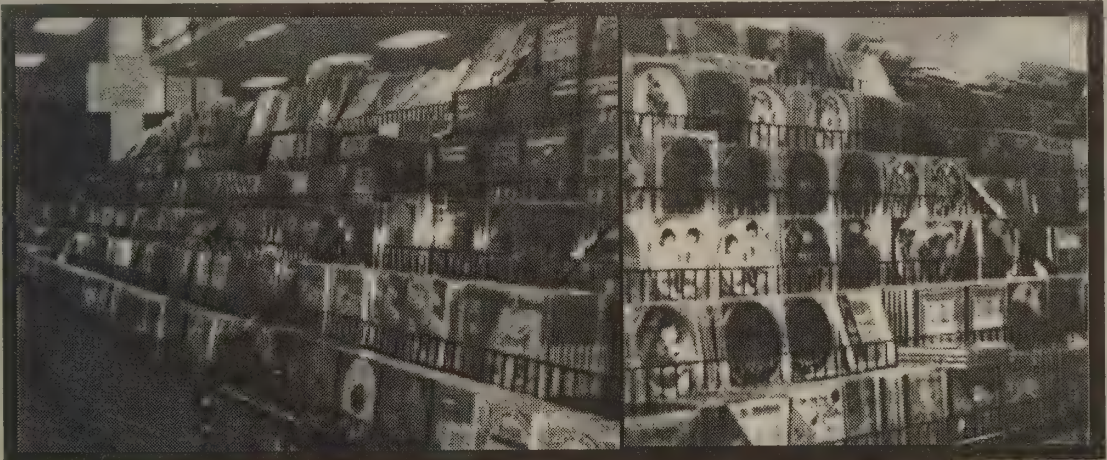
"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

CD ROM TITLES

Guaranteed
Lowest
Prices

Over ~~400~~ 500 CD ROM Titles In Stock at all locations

Including: Adventure, Games, Educational, Children's, and many more for PC & MAC...



JUST A FEW OF THE CHOICES YOU CAN RECEIVE FOR ONLY...

- 3-D ACTION & ADVENTURE
- BEST ARCADE SHAREWARE
- BEST OF BOARD GAMES
- BEST OF THE BEST SHAREWARE
- BEST OF THE BEST VOLUME 2
- BEST OF WINDOWS GAMES
- BIBLES & RELIGION
- BUSINESS ASSISTANT
- BUSINESS CLIPART
- CALIFORNIA COLLECTION
- CARDS & DICE
- CHILDRENS ARCHADE GAME
- CHILDRENS COLORING WORLD
- CLIPART WAREHOUSE
- COMPLETE BOOKSHOP
- COMPLETE HOME & OFFICE LEGAL GUIDE
- COMPUTER REFERENCE LIBRARY
- DEATHSTAR ARCADE BATTLES
- DESKTOP BOOKSHELF
- DICTIONARIES & LANGUAGES
- ENCYCLOPEDIA OF SOUND 1
- ENCYCLOPEDIA OF SOUND 2
- FLIGHT ARCADE GAMES
- GARDENING
- HAM RADIO
- HOTTEST NEW RELEASES 1
- HOTTEST NEW RELEASES 2
- HUGOS HOUSE OF HORRORS
- KIDS 2-6 YEARS EDUCATION
- KIDS 4-10 YEARS EDUCATION
- LEARNING & TUTORIALS
- MIDI MASTER
- MOTHER OF ALL CLIPART
- MULTIMEDIA MANIA
- MVP GAME JAMBOREE
- OUR SOLAR SYSTEM
- PERSONAL FINANCE
- SHAREWARE HEAVEN
- SOUND LIBRARY 2
- SOUND SENSATIONS
- TECHNOTOOLS
- THE GAMES COLLECTION
- THE GOLD COLLECTION
- THE PLATINUM COLLECTION
- THE WINDOWS COLLECTION
- THREE STOOGES
- TOO MANY TYPE FONTS
- TRAVEL TO SPACE
- TRIVIA GAMES
- TV COMMERCIALS OF THE 50'S & 60'S
- WINDOWARE
- WORLD TRAVELER

$7.95 EACH

OVER 100 TITLES TO CHOOSE FROM!

NEW!

JOIN NCA'S CD FREQUENT BUYER CLUB! ...BUY 10 CD'S & GET THE 11TH FREE!

*SEE STORE FOR MORE DETAILS.

3FT. 6PK.

NEW!

6 HOT KIDS CD TITLES!

COMPACT disc

COMES WITH:
- FAMILY CIRCUS OUR HOUSE
- LENNY S MUSICTOONS
- CINDERELLA: THE ORIGINAL FAIRY TALE
- PUTT PUTT FUN PAK
- SPELLING JUNGLE
- SING ALONG KIDS

$15.97

10 PACK

NEW!

10 HOT CD TITLES!

COMPACT disc

COMES WITH:
- BLUE FORCE
- RINGWORLD
- THE FAMILY DOCTOR
- KIDS CAN READ
- THE MAGIC DEATH
- RED BARRON
- THE FIRST EMPEROR OF CHINA
- HILARIOUS
- INCA II
- WORLD LITERARY HERITAGE

$29.97

ULTIMATE GAME COLLECTION

NEW!

7 HOT CD TITLES!

COMPACT disc

- ULTIMA GAMES
- SPECTRS VR CLASSIC
- SPACESHIP WARLOCK
- SPEAR OF DESTINY
- JET FIGHTER II
- QUANTUM GATE
- BONUS DEMO DISC W/ OVER 8 INTERACTIVE GAMES LIKE HELL & CYBERIA

$29.97

QUICKEN '95

NEW!

ORGANIZES FINANCES PAINLESSLY

RETAIL PACKAGE

Intuit®

COMPACT disc

LOADED WITH FEATURES:
- BETTER REPORTING
- ADDITIONAL PLANNING TOOLS
- CUSTOMIZED BUDGETING
- REGISTER ENHANCEMENTS
- EASY TO USE
- SAVES YOU TIME

INCREDIBLE PRICE!

$26.99

VISIT ANY OF OUR SHOWROOMS TODAY

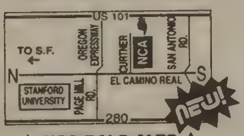
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

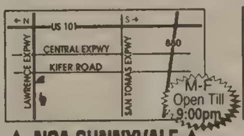
Sale Ends 05/28/95

DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

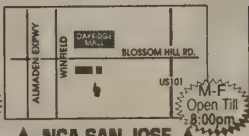
PRICE SUBJECT TO CHANGE WITHOUT NOTICE LIMITED STOCK ON SPECIAL ITEMS NOT RESPONSIBLE FOR TYPE OR ERRORS



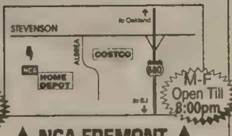
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

⑮

* "LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

SOUND, VIDEO & GRAPHICS

MIRO VIDEO MULTIMEDIA UPGRADE KIT

miro

miroVIDEO 20TD live!

Graphic Card, Video Scaling, Video Capture& TV Tuner All in One!

VLB or PCI

5-IN-1 SINGLE SLOT SOLUTION!

- 2 Meg DRAM Windows Accelerator
- Cable-ready TV tuner with 100-station memory
- Video scaling provides full-screen video at 30FPS
- Still-frame video capture 640x480 @ 16.7 million colors
- 30fps video capture- 320x240 @ TV quality
- Feature connector for MPEG player boards

NEW!

NOW INCLUDES VIDEO STUDIO II SOFTWARE!

$\$499^{95}$

VIDEO/MPEG & GRAPHICS ACCELERATION

miroVIDEO 12PD

VLB or PCI

- 1MB DRAM (exp. to 2MB) Windows Acceleration
- Up to 16.7 million colors
- Up to 73Hz refresh
- .AVI Video playback scalable to full screen at 30 fps
- MPEG playback w/ software included
- 32-bit interleaving Alliance 3210 processor
- Includes MPEG sampler on CD-ROM

NEW!

$\$179^{95}$

VIDEO PLAYBACK & WINDOWS ACCELERATION

miroCRYSTAL 40pv avi

Hardware Accelerated Digital Video Playback!

The ultimate in graphics and full motion video acceleration!

PCI ***2 Processors on-board!***

- **4MB VRAM**
- **Weitek Power9100 power controller**
- **Weitek VideoPower Video chip**
- **16.7 million colors at 1280X1024**
- **Up to 1600X1280 resolution**
- **100-Hz refresh at 1024X768**
- Video capture
- Video playback in full-size, full-motion
- Video overlay in full-size, full-motion
- Still capture up to 640x480 @ 24-Bit
- Full motion capture up to 320x240 ™30 frames per second
- Includes **U-LEAD Video Studio** capture & editing software
- ISO 9002 standard

NEW!

$\$999^{95}$

miroCRYSTAL 20pv avi

Hardware Accelerated Digital Video Playback!

The ultimate in graphics and full motion video acceleration!

PCI ***2 Processors on-board!***

- **2MB VRAM**
- **Weitek Power9100 power controller**
- **Weitek VideoPower Video chip**
- **65,536 colors in 1152X864**
- **Up to 1408X1024 resolution**
- **100-Hz refresh at 1024X768**
- Video playback in full-size, full-motion
- AVI scaling to full screen at full motion
- ISO 9002 standard

NEW!

$\$499^{95}$

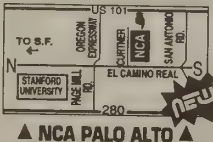
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

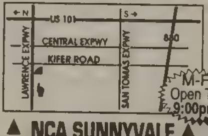
Sale Ends 05/28/95

DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

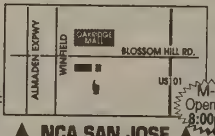
⑯ SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS


US 101
TO S.F.
OREGON EXPRESSWAY
CURTNER
NCA
SAN ANTONIO RD.
N
S
STANFORD UNIVERSITY
PAGE MILL RD.
EL CAMINO REAL
280
NEW!

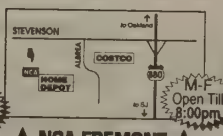
▲ **NCA PALO ALTO** ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480


N
US 101
S
CENTRAL EXPWY
KIFER ROAD
LAWRENCE EXPWY
SAN TOMAS EXPWY
880
M-F Open Till 9:00pm

▲ **NCA SUNNYVALE** ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420


ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD.
US 101
M-F Open Till 8:00pm

▲ **NCA SAN JOSE** ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610


STEVENSON
to Oakland
ALBRAE
NCA
HOME DEPOT
COSTCO
880
to SJ
M-F Open Till 8:00pm

▲ **NCA FREMONT** ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
***Call* (408) 522-3050**

* "LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

SOUND, VIDEO & GRAPHICS

MIROVIDEO DEDICATED VIDEO CAPTURE CARDS

INCLUDES
FLYING FONTS PRO 3-D ANIMATION
SOFTWARE!

miro

miroVIDEO DC1 tv

Video Digitizing Directly To Your Hard Disk • Overlays, Titles, Special Effects • Super VHS Quality, PAL/NTSC Video Output

Miro's DC1 tv Video Capture Board Delivers Full Screen 640X480 Full Motion 30fps Video Output And Non Linear Audio & Video Editing To The Personal Computer At A Remarkable Price!

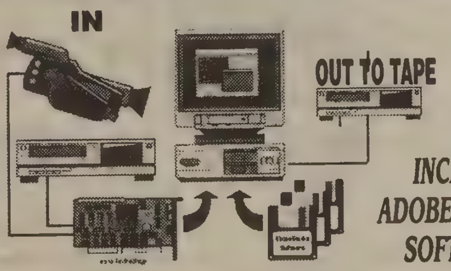
MANUFACTURED IN GERMANY!

State-Of-The-Art Features:

- Non-linear video editing on any Windows PC
- Only One VCR for recording & playback
- Instant access to any frame
- Great transition effects
- Digital video back up
- No generation loss

Hardware Highlights:

- Supports all video formats
- Adjusts video filter
- on-board Motion JPEG compressor
- Digital video encoder
- Compatible with all graphics boards



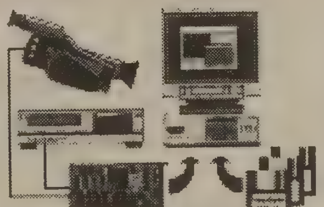
INCLUDES ADOBE PREMIER SOFTWARE!

$699^95

miroVIDEO D1
VIDEO CAPTURE CARD

Now experience digital video on any Windows PC
Spectacular transition effects, Normally only available to video professionals
Fantastic multimedia impression, Integration of full motion video, titles and pictures adds a new dimension to personal computing
Hours of fun - pictures, clips and tricks combined with creativity lead to a thrilling adventure in motion and colors

MANUFACTURED IN GERMANY!



- **Video Capture**
- **Video Editor**
- **Photo Plus**
- **HARDWARE HIGHLIGHTS:**
- **Supports all video standards**
- **Adjustable video filters**
- **miroVIDEO XL compressor**
- **16.7Million colors compatible**

$239^95

MIRO TWINFACE GRAPHICS ACCELERATORS

DOUBLE•YOUR•DESKTOP

miroCRYSTAL 20SD twin

SPREAD YOUR WINDOWS WORKSPACE ACROSS TWO MONITORS. HIGH QUALITY IMAGES AND TOP RESOLUTIONS. PERFECT FOR CAD, DTP & FINANCIAL APPLICATIONS.

VLB or PCI

Two 64-Bit graphics processors provide the power you need
Up to 1280x1024 resolution on each monitor
100Hz refresh rate
65,536 colors at 1024x768 & 85Hz
Requires only one expansion slot

NEW!

$549^95

miroCRYSTAL 20SV twin 2MB VRAM...$999.95
(special order)

miroCRYSTAL 40SV twin 4MB VRAM...$1299.95
(special order)

MIRO GRAPHICS ACCELERATORS

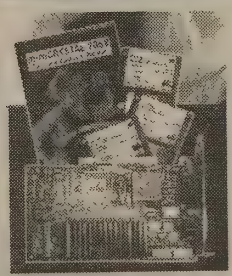
miroCRYSTAL 12SD

VLB or PCI

Graphics Chip S3 Trio32™ **1MBytes DRAM exp. to 2MB**
Up to 1280x1024 at 70Hz
Jumperless, No dip switches
2 year warranty

NEW!

$119^95



miroCRYSTAL 20SD

VLB or PCI

Graphics Chip S3 Vision864™ with **2MBytes DRAM**
65,536 Colors in 1024X768 pixels mode
Top Resolution of 1408X1024
100Hz at 1024X768 Pixels

64-BIT!

DESIGNED IN GERMANY!

$199^95

MIRO SOUND WAVETABLE SOUND CARD

miroSOUND PCM1 pro

$199^95

STATE-OF-THE-ART-FEATURES: 16-BIT • 44 VOICE • 128 INSTRUMENT SAMPLES • YAMAHA OPL-4 WAVETABLE CHIP SET
• IDE INTERFACE FOR SONY, PANASONIC & MITSUMI

95 J

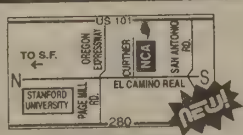
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

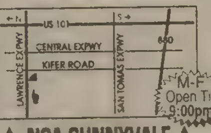
Sale Ends 05/28/95

DISCOVER · AMERICAN EXPRESS · MasterCard · VISA · PURCHASE ORDERS

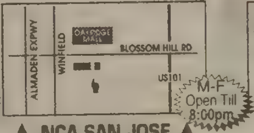
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS



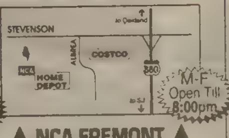
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA
CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

⑰

* "LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

HIGH QUALITY UPGRADES

ORCHID

Video Cards

Kelvin 64

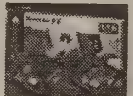
64-Bit Windows Graphics Accelerator

PCI, VLB OR ISA

1MB DRAM 64-Bit........................ $135⁹⁵

2MB DRAM 64-Bit........................ $195⁹⁵

Kelvin EZ *PCI OR VLB*



32-Bit Windows Graphics Accelerator

1MB DRAM 32-Bit........................ $115⁹⁵

Fahrenheit 64 *PCI OR VLB*

64-Bit Fast True Color Windows Accelerator

1MB DRAM 64-Bit........................ $144⁹⁵

2MB DRAM 64-Bit........................ $194⁹⁵

Fahrenheit PRO 64 *PCI OR VLB*

64-Bit Extremely Fast True Color Windows Accelerator

1MB VRAM 64-Bit........................ $298⁹⁵

2MB VRAM 64-Bit........................ $448⁹⁵

ORCHID

Multimedia

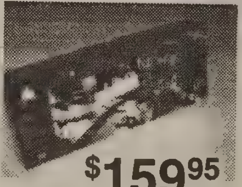
SoundWave 32+SCSI

16-Bit Sound Card W/Digital Signal Processing $189⁹⁵

GameWave 32

Multimedia Ready Wave Table Sound Card

$99⁹⁵



SoundWave 32

Advanced Wave Table/DSP 16 bit Sound Card.............. $159⁹⁵

Vidiola

Video capture, edit and playback Solution........................ $339⁹⁵

Vidiola PRO/C

Desktop Video Editing Solution........................ $469⁹⁵

Vidiola PRO/D

Video capture, edit and playback Solution........................ $529⁹⁵

Vidiola PREMIUM Video output.... $697⁹⁵

Accelerator Cards

DIAMOND *Accelerating in Graphics and Multimedia*

Stealth 64 DRAM VLB *1MB/2MB..................$135⁹⁵/$188⁹⁵*

Stealth 64 DRAM PCI *1MB/2MB..................$135⁹⁵/$188⁹⁵*

Stealth 64 VRAM (PCI OR VLB) *2MB/4MB..$288⁹⁵/$425⁹⁵*

Stealth 64 VIDEO (PCI OR VLB) *2MB/4MB.VRAM.....$309⁹⁵/$469⁹⁵*

Viper SE VLB *with 2MB/4MBVRAM INCLUDES CORAL 3.0..$329⁹⁵/$425⁹⁵*

Viper SE PCI *with 2MB/4MBVRAM INCLUDES CORAL 3.0...$329⁹⁵/$425⁹⁵*

SPEED STAR 64 *PCI or ISA 1 MB/2MB DRAM...$144⁹⁵/$189⁹⁵*

SpeedStar Pro SE *1MB/2MB DRAM VLB or PCI.............$104⁹⁵/$160⁹⁵*

GAMES ACCELERATOR KIT. *PCI or VLB WITH 15 CD TITLES..........$149⁹⁵*

MEMORY UPGRADES

2MB VRAM	*Upgrade for Viper Pro Video*	*$175⁹⁵*
2MB VRAM	*Upgrade for Viper SE*	*$175⁹⁵*
2MB VRAM	*Upgrade for Stealth 64*	*$175⁹⁵*
1MB DRAM	*Upgrade for Stealth 64*	*$80⁹⁵*
1MB DRAM	*Upgrade for SpeedStar 64*	*$80⁹⁵*

AUTHORIZED RESELLER

COMPLETE LINE OF PRINTERS AVAILABLE!

HEWLETT PACKARD

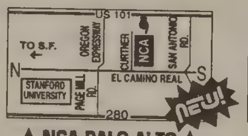
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

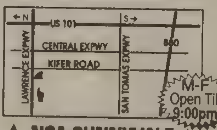
Sale Ends 05/28/95

DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

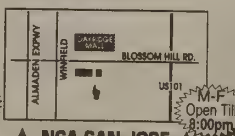
⑱ CE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS


US 101
TO S.F.
OREGON EXPRESSWAY
CURTNER
NCA
SAN ANTONIO RD.
N
S
EL CAMINO REAL
STANFORD UNIVERSITY
PAGE MILL RD.
280
NEW!

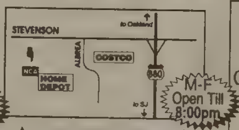
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480


← N
US 101
S →
CENTRAL EXPWY
KIFER ROAD
880
LAWRENCE EXPWY
SAN TOMAS EXPWY
M-F Open Till 9:00pm

▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420


ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD.
US 101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610


STEVENSON
to Oakland
ALBRAE
COSTCO
NCA
HOME DEPOT
880
to SJ
M-F Open Till 8:00pm

▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA *CORPORATE*
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

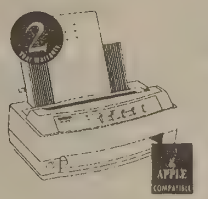
QUALITY PRODUCTS

brother® We're at your side

HJ-400

Desktop Ink Jet Printer

Get the Straight Paper Path Advantage

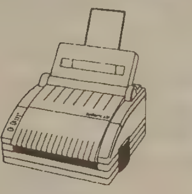

2 Year Warranty
APPLE COMPATIBLE

- 360x360
- IBM & Apple compatible
- 12 resident fonts (plus additional TrueType compatible fonts)
- 100 page automatic cut-sheet feeder
- 40% more dots per inch than 300 dpi printers
- Windows ready
- 2 year warranty

$\$255^{95}$

HL-630

Laser Printer

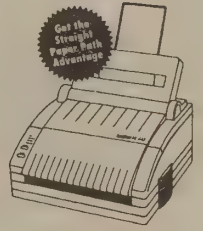


- 300 dpi
- 6 PPM-50% faster than 4 PPM engines
- Straight paper path
  - Reduces annoying jams & curls
  - Prints envelopes & various papers reliably
- 45 fonts
- 512 KB memory with Enhanced Memory Management
- Easy to use, low cost supplies
- 1 year limited warranty

$\$395^{95}$

HL-645

Laser Printer

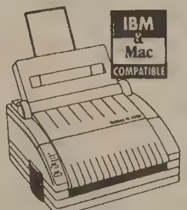

Get the Straight Paper Path Advantage

- 300x300 DPI
- 1MB RAM with Enhanced Memory Management
- 6 PPM-50% faster tahn 4 PPM engines
- Staight paper path
  - Reduces annoying jams & curls
  - Prints envelopes & various papers reliably
- Free ClickBook software-$69.95 value
- 1 year limited warranty

$\$459^{95}$

HL-655M

Laser Printer

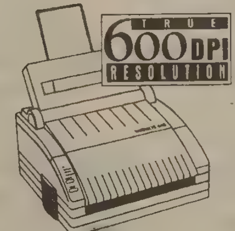

IBM & Mac COMPATIBLE

- 300x300 DPI
- Up to 45 fonts
- Apple Mac/IBM compatible
- 2 MB RAM with Enhanced Memory Management
- 6 PPM-50% faster than 4 PPM engines
- Staight Paper Path
  - Reduces annoying jams & curls
  - Prints envelopes & various papers
- Free ClickBook software-$69.95 value

$\$569^{95}$

HL-660

Laser Printer

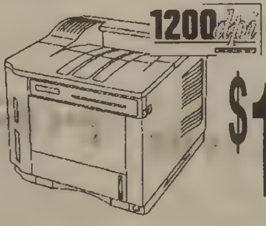

TRUE 600 DPI RESOLUTION

- 6 PPM Laser Printer-50% faster than 4 PPM engines
- Exclusive Straight Paper Path Technology
- 600 DPI resolution with advanced Photoscale Technology for sharp, crisp, professional output
- 2MB standard memory with Enhanced Memory Management
- Low cost supplies
- Optional BR-Script Level 2 (PostScript Level 2 Language Emulation)

$\$669^{95}$

HL-1260

Laser Printer

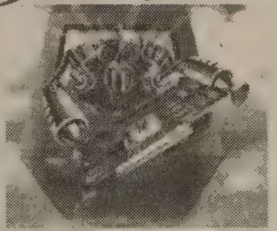


- 12 PPM Laser Printer-50% faster than 8 PPM engines
- 1200 DPI Class graphical output
  - 600 DPI Resolution
  - Advanced Photscale Technology
  - High Resolution Control
  - 87 fonts & 11 bar codes
- PCL Level 5e/BR-Script Level 2 (Postscript Level 2 Language Emulation)
- Outstanding paper handling & optional duplexing unit
- NIO Slot for Network connectivity & third-party enhancements
- PCMCIA Type III slot for additional storage

$\$1219^{95}$

SPiDER® Graphics, Inc.

SPiDER Windows Accelerators 16.7 Million Colors



TARANTULA 64 VLB/PCI

NEXT GENERATION 64-BIT GRAPHICS

- 32-Bit True Color Palette DAC
- Up to 1600X1200 in 64K Colors
- True Color at 1024X768 N/I
- Energy Saving Green PC
- Virtual Screen, Resolution & Refresh on-the-fly

NEW LOWER PRICE!

2MB VRAM	4MB VRAM
$\$233^{95}$	$\$355^{95}$

TARANTULA LITE PCI/VLB

GRAPHICS ACCELERATOR

- Screen refresh rates up to 75Hz
- High resolution up to 1280x1024
- High color up to 16M-32 BPP
- Display memory expancable to 2MB DRAM
- Spider Web: Windows Tools software

NEW!

1MB DRAM	2MB DRAM
$\$89^{95}$	$\$139^{95}$

SPiDER 256 CACHE

A Breakthrough in video Technology: Video Caching!

- 128KB Video Cache (exp. 256KB)
- 32-Bit VESA VL-Bus
- Hardware Cursor & Line Drawing, BitBlt
- 1MB of Display memory (exp. 2MB)
- 16 Million Colors
- Up to 1280X1024 in 256 colors
- Refresh Rate up to 75Hz (NI)
- Virtrual Screen, Adjust Screen and Refresh Rate Check

NEW LOWER PRICE!

1MB DRAM w/128C	2MB DRAM w/256C
$\$99^{95}$	$\$144^{95}$

SPiDER 64VLB/PCI

64-Bit Video Accelerator Card

- 64-Bit video memory interface
- 64-Bit BitBlt
- 16 Million Color in 32-Bit/Pixel format
- 1024X768 in 16 Million Colors ; 1280X1024 in 64K Colors
- High Refresh Rate: up to 75Hz (NI)
- Display memory Expandable up to 4MB
- Virtual Screen, Adjust Screen and Refresh Rate Check
- Bus available: VESA VL-Bus and PCI

NEW LOWER PRICE!

2MB DRAM	4MB DRAM
$\$154^{95}$	$\$243^{95}$

SPiDER 32VLB

1MB DRAM/2MB DRAM .... $\$79^{95}/\$124^{95}$

SPiDER 32VLB Plus

1MB DRAM/2MB DRAM .... $\$88^{95}/\$133^{95}$

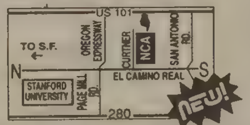
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

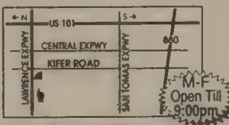
Sale Ends 05/28/95

DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

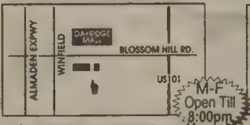
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS


US 101
TO S.F.
OREGON EXPRESSWAY
CURTNER
NCA
SAN ANTONIO RD.
N
S
EL CAMINO REAL
STANFORD UNIVERSITY
PAGE MILL RD.
280
NEW!

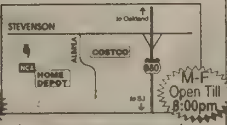
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480


N
US 101
S
CENTRAL EXPWY
KIFER ROAD
LAWRENCE EXPWY
SAN TOMAS EXPWY
880
M-F Open Till 9:00pm

▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420


ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD.
US 101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610


STEVENSON
to Oakland
ALBRAE
COSTCO
NCA
HOME DEPOT
880
to SJ
M-F Open Till 8:00pm

▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

(19)

87 J

* "LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

VIDEO CARDS

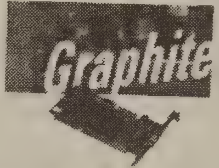
Hercules

The Fastest Real-World Windows Accelerator

Hercules Picture Windows display lets you change your Windows display setting with a click of a mouse!

D301	Dynamite Pro 1MB DRAM ISA Bus	$169.95
D302	Dynamite Pro 2MB DRAM ISA Bus	$209.95
D601	Dynamite Pro 1MB DRAM VLB	$159.95
D701	Dynamite Power 1MB DRAM VLB	$161.95
D702	Dynamite Power 2MB DRAM VLB	$192.95
D902	Dynamite PCI Pro 2MB DRAM PCI	$209.95

Blazing 32-Bit
Accelerator for
Windows and AutoCAD
High Refresh Rate-
Dual Ported VRAM
2-Year Warranty



PG310	Graphite Power 1MB ISA	$235.95
PG420	Graphite Power 2MB ISA	$310.95
PG 610	Graphite Power 1MB VLB	$222.95
PG720	Graphite Power 2MB VLB	$310.95

HERCULES

The Complete 64-Bit Solution-SuperStable Refresh Rates up to 150Hz-Unrivaled, World-Class Service & Support

GT2020 2MB PCI/VLB	$333.95
GT2040-4MB PCI/VLB	$476.95

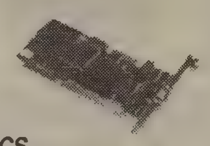
STINGRAY

S501	Stingray VLB 1MB DRAM	$99.95
S801	Stingray PCI 1MB DRAM	$109.95

SPiDER® Graphics, Inc.

COMPLETE LINE OF PRODUCTS AVAILABLE

MATROX MGA POWER GRAPHICS



HIGH-PERFORMANCE GRAPHICS ACCELERATOR

Revolutionary 64-Bit Architecture - DynaView 2D & 3D - Refresh Rate Up To 80Hz.

Impression Plus Upgrade	$221.95
Impression Plus 2MB PCI	$359.95
Impression Plus A/2MB ISA	$419.95
Impression Plus P12/220 PCI 220 Mghtz Ram Deck	$455.95
Impression Plus A/220 ISA 220 Mghtz Ram Deck	$490.95
Impression Lite PCI 2	$295.95
Impression Lite VLB 2	$295.95

Number Nine
Computer Corporation
Excellence in PC Graphics

9GXe 64 Breakthrough Graphics Accelerator

9GXe 64 PCI or VLB 1MB/2MB	$169.95/$245.95
9GXe 64 Pro PCI or VLB 2MB/4MB	$335.95/$499.95
15-to 5BNC Monitor Cable	$89.95

IMAGINE 128 GRAPHICS ACCELERATOR

PCI BUS 4MB VRAM

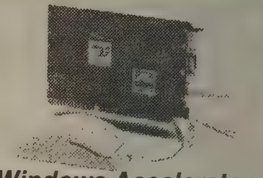
- NEW performance standard with 128-bit acceleration
- 4MB high speed VRAM
- Drawing bandwidth up to 500 million pixels per second
- Two memory windows for simultaneous host and imagine 128 access
- 65,536 colors (16BPP) up to a resolution of 1600x1200 pixels 16.8 million colors (32BPP) up to 1152X864 pixels
- Refresh rates up to 100Hz
- Simultaneous processing of sixteen 8-bit , eight 16-bit or four 32-bit pixels

$798.95

9GXe64Pro 1600 Powerhouse

9GXePro 1600 2MB PCI 1600x1200	$525.95
9GXePro 1600 2MB VLB 1600x1200	$525.95
9GXePro 1600 4MB PCI 1600x1200	$675.95
9GX2Pro 1600 4MB VLB 1600x1200	$675.95

ATI TECHNOLOGIES INC.



WIN TURBO 64-BIT, *Windows Accelerator*

ISA, PCI or VLB

2MB VRAM, 16.7 million colors, 1280x1024, Full Acceleration up to 16.7 million colors, Flicker free to 100Hz, Winswitch instant mode switching

$295.95

GRAPHICS EXPRESSION, *Windows Accelerator*

ISA, PCI or VLB

2MB DRAM, 16.7 million colors, 1280x1024, Multimedia video accelerator, multiple Bus support, 75Hz refresh

$215.95

1MB DRAM.........$164.95

GRAPHICS WONDER, *Windows Accelerator*

ISA or VLB

1MB DRAM, up to 16.7 million colors, up to 1280x1024, 76Hz flicker free display

$119.95

GRAPHICS ULTRA PRO

ISA or VLB

2MB VRAM, NI 1280X1024, accelerated 65,000 color graphics plus true-color, 76Hz flicker-free display, zero wait-state VGA

EISA version.........$329.95

$279.95

GRAPHICS PRO TURBO 64

VRAM, Fast 64-Bit acceleration, Windows mode switching, enhanced Windows operation, flicker free refresh.

2MB VLB/PCI/ISA	$335.95
4MB VLB/PCI/ISA	$519.95

MEDIAMERGE

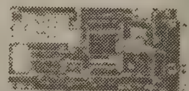
Complete video editing software for Windows Includes:

- Scene editor
- Text editor
- Audio editor
- Story editor
- Media player
- Transition effects

$169.95

Graphics Ultra Pro EISA	$329.95

SVGA VIDEO CARDS



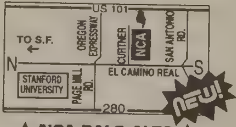
SVGA 256K Video Card	$29.95
SVGA 512K 1024X768	$39.95
SVGA 1024K 1024X768	$59.95
SVGA VESA Local Bus	$69.95
SVGA PCI 1024x768	$79.95

NCA Computer Products™

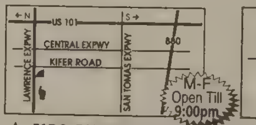
Your Computer Upgrade SUPERMARKET™

Sale Ends 05/28/95

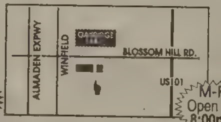
AMERICAN EXPRESS VISA PURCHASE ORDERS



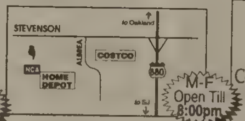
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call **(408) 522-3050**

(20)

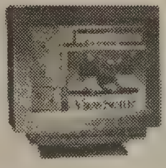
WEST PRICE GUARANTEE offer applies only to items which are in stock at an authoized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantitiy offers, or on bonus or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

VIDEO MONITORS

ViewSonic®

State of the Art

ViewSonic-15

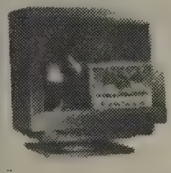


- 15" RGB Color Monitor
- 1280X1024
- Non-Interlaced
- .27dpi

$\$425^{95}$

ViewSonic-15ES 1024 x 768 .28....... .$\$355^{95}$
ViewSonic-15G 1280 x 1024 .28.........$\$388^{95}$

ViewSonic-17

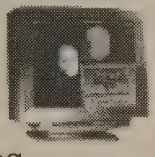


- 17" RGB Color Monitor
- 1600x1280 .27dpi
- Non-Interlaced
- Flat Screen

$\$858^{95}$

ViewSonic-17G 1280x1024, 50-160Hz...$\$745^{95}$
ViewSonic-17E 1280 x 1024, 50-90Hz...$\$698^{95}$

ViewSonic-20PS



- 20" RGB Color Monitor
- 1600x1200, .28dpi
- Non-Interlaced
- Dual Page Display

$\$1448^{95}$

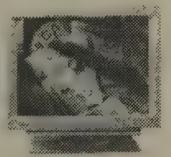
ViewSonic-21PS

- 21" Color Monitor
- 1600X1280
- .25dpi
- Non-Interlaced

$\$1758^{95}$

HITACHI®

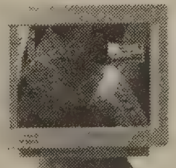
SuperScan™Pro15s



- 15" SVGA, Non-interlaced
- 1280x1024, .28dpi
- Flat Screen

$\$389^{95}$

SuperScan™CM1797



- 17" SVGA Non Interlaced
- 1600x1200, .26dpi
- Flat Screen

$\$955^{95}$

SuperScan™Pro 20

- 20" SVGA Non-Interlaced
- 1600x1280,
- Flat Screen
- CM2096

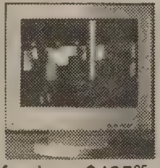
$\$1199^{95}$

CM2198-514: 21" SVGA (NI) 1600X1280, .28dpi ....$\$1959^{95}$
CM2198-513: 21" 1600x1280 76Hz ....$CALL

NOKIA

Engineered in Europe for the World

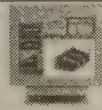
Workstation & CAD Quality Monitors



- **Autosync**
- **Digital Controls with Menu**
- **Full Screen Power Save**
- **MicroEmission**

449E 15" Non-Int. 1024x768, 80Hz refresh......$\$435^{95}$
447L 17" Non-Int. 1024X768,110Hz refresh... $\$685^{95}$
447X 17" Non-Int. 1600x1280..........................$\$975^{95}$
445X 21" Non-Int. 1600x1280, 120Hz refresh..$\$2255^{95}$

iiyama VISIONMASTER™



MF-8617 17", .26dpi, Digital Control, Energy Star Compliant ....$\$769^{95}$

MF-8221 21", .28dpi, Microprocessor control, 1600x1200, 24-85KHz ....$\$1855^{95}$

MF-8621 21", .26dpi, 1600x1200, 24-85KHz, Mircroprocessor control ....$\$2255^{95}$

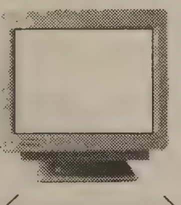
MT-9121 21", 1600x1200, 72Hz, Hybrid Trinitron, Microprocessor control & remote control! ....$\$1999^{95}$

NCA's HIGH QUALITY!

14" SVGA MONITOR

- Non-Interlaced
- .28dpi
- 1024x768
- Energy Star Compliant

$\$209^{95}$



EDGE TO EDGE DISPLAY!

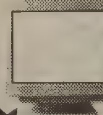
15" SVGA MONITOR

- Non-Interlaced
- .28dpi
- 1280x1024
- Energy Star Compliant

$\$309^{95}$

PIXIE TECHNOLOGIES

17" COLOR MONITOR



- Non-Interlaced
- .26dpi
- 1280x1024
- 100Hz

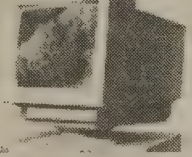
$\$599^{95}$

NEW!

MiTAC

Affordable Quality Monitors

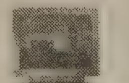
17" SVGA



- 1600x1280
- .26dpi
- Non-interlaced
- "The Green Monitor"
- Low Radiation
- L1564PD

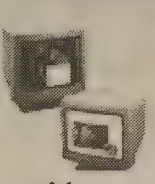
$\$659^{95}$

MAG INNOVISION



DX15F 15" Non-Int. 1280x1024, .28mm ....$\$358^{95}$
DX17F 17" Non-Int. 1280x1024, .28mm ....$\$668^{95}$

NANAO®



PROFESSIONAL VIDEO DISPLAY

F2-15 15" .28dpi, 1280x1024 66Hz TCO ....NEW!....$\$545^{95}$
F2-17 17" .28dpi, 1280x1024 66Hz TCO ...NEW!....$\$875^{95}$
F2-17EX 17" .26dpi 1600x1200 66Hz TCO ..NEW!...$\$985^{95}$
T217-17" Trinitron Tube, N/I 1280x1024, .25dpi .....$\$1267^{95}$
T220 20" Trinitron Tube, N/I 1600x1280, .25dpi .....$\$1965^{95}$
T760iw 21" 1280X1024, .31dpi ....$\$2299^{95}$

NEC

2V *VALUE SERIES*

- 14", .28mm
- 1024x768
- Non-Interlaced
- Flat screen

$\$309^{95}$

3V *VALUE SERIES*

- 15", .28mm
- 1024x768
- Non-Interlaced
- Flat screen

$\$395^{95}$

XV15 15" .28MM.....$\$435^{95}$

XE15 *ENTERPRISE SERIES*

- 15", .28mm
- 1024x768
- XGA-2 Compatible
- Flat screen

$\$525^{95}$

XE17 *ENTERPRISE SERIES*

- 17", .28mm
- 1024x768
- DPI on-the-fly
- Flat screen

$\$945^{95}$

XE21 *ENTERPRISE SERIES*

- 21", .28MM
- 1280x1024
- Up to 76Hz refresh

$\$1958^{95}$

XP15 *PROFESSIONAL SERIES*

- 15", .28MM
- 1024X768
- 76Hz refresh
- Opticlear

$\$648^{95}$

XP17 *PROFESSIONAL SERIES*

- 17", .28MM
- 1280x1024
- Opticlear
- Up to 76Hz refresh

$\$1199^{95}$

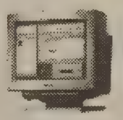
XP21 *PROFESSIONAL SERIES*

- 21", .28MM
- 1600X1200
- OPTICLEAR
- Up to 76Hz refresh

$\$2495^{95}$

SONY

1425CPD



- 14" Trinitron Color Monitor
- .25dpi, MPR-II
- 50-90Hz
- Energy Star

NEW!

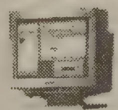
$\$349^{95}$

CPD-15SF

- 15" Color Monitor
- 1280X1024, .25dpi
- Non-Interlaced

$\$412^{95}$

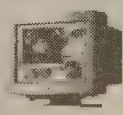
GDM-17SE1



- 17" Color Monitor
- 1280X1024, .25dpi
- Non-Interlaced

$\$989^{95}$

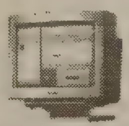
CPD-17SF



- 17" Color Monitor
- Max. Res. 1280x1024, .25dpi
- Non-Interlaced

$\$875^{95}$

GDM20SE



- 20" Color Monitor
- State Of The Art
- 1600x1200
- .30dpi
- Non-Interlaced

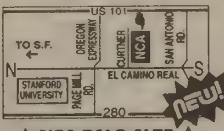
$\$1889^{95}$

NCA Computer Products™

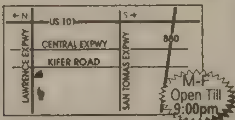
Your Computer Upgrade SUPERMARKET™

Sale Ends 05/28/95

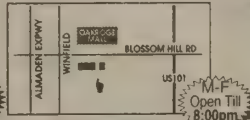
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS



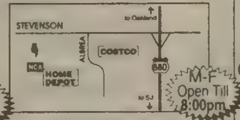
▲ **NCA PALO ALTO** ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480



▲ **NCA SUNNYVALE** ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420



▲ **NCA SAN JOSE** ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610



▲ **NCA FREMONT** ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

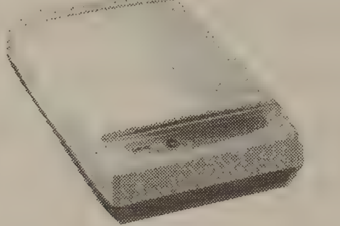
㉑

*LOWEST PRICE GUARANTEE offer applies only to items which are in stock at an authoized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantitiy offers, or on bonus or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-class

HIGH QUALITY SCANNERS

UMAX®

The Magic of Color™



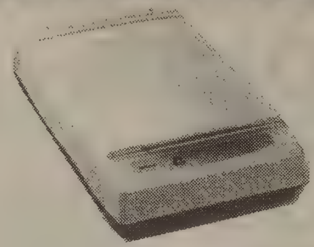
T-630

The High-Productivity Color Scanner

- The Vista-T630 is the fastest 3 pass scanner on the market today
- Full spectrum cold-cathode lamp for longer life
- 4800 dpi maximum resolution with UltraView technology
- Transparency adapter available
- Document feeder available-50 page

PC Software	MAC Software
•ImageFolioLE	•Color-IT
•Maxsoft's Wordlinx 2.0	•Wordlinx 2.0
•Corel Professional Photos	•Corel Professional Photos
•Microsoft Home CD Sampler	•KPT Power Photos CD Sampler

$\$489^{95}$



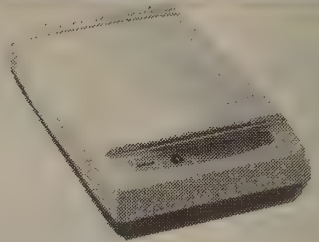
UC-1260

High Resolution Color Scanner

- Legal size scanning area
- 9600 dpi
- De-screening, auto-density adjustment, filtering function
- Choice of 2 exciting software bundles
- Choice of two exciting software bundles
- TWAIN compliant
- Built in SCSI-II interface w/2MB bus caching buffer
- Optional ADF and UTA

PC Software	MAC Software
•Adobe Photoshop Full Version	•Adobe Photoshop Full Version
•Ultra View-interpolation software 2400dpi	•Ultra View-interploation software 2400dpi
•Kai's Power Tools	•Kai's Power Tools
•SCSI cord/cable	•SCSI cord/cable
•TWAIN	•TWAIN

$\$889^{95}$



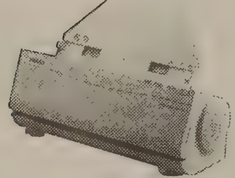
Vista-S6

The New Low-Cost, High Speed Single-Pass Scanner

- 4800dpi high resolution
- Single pass with single cold cathode lamp technology
- De-screening, auto-sensity adjustment, filtering function
- Choice of 2 exciting software bundles
- TWAIN compliant
- Built in SCSI-II interface w/1MB bus caching buffer
- Micro-stepping optical transmission for faster speed
- MagicMatch color management system
- Optional UTA

PC Software	MAC Software
•Adobe Photoshop	•Adobe Photoshop
•Omni Page Direct	•Omni Page Direct
•Magic Match-Color management tech.	•SCSI cable & terminator
•SCSI cord/cable	•Power cord
•TWAIN	

$\$665^{95}$



NEW!

Page Office

The Electronic In-Box For Your PC

- Easy one-touch button scanning
- 8-bit gray scale, 1 bit line art & text modes
- User programmable input buttons
- Fastest scanner in it's class
- 1200x600 dpi optical resoltution
- Transparency adapter included
- MagicScan scanning software included
- Full spectrum cold-cathode lamp for longer life
- 9600 dpi maximum resolution

IMAGING MAGAZINE PRODUCT OF THE YEAR 94

$\$389^{95}$

Scan This

True Color Image and Text Scanning

- True 24-bit color(16.8 million colors), true 256 gray scale and B&W
- 800dpi
- Scanning width of 4.13 inches
- Auto/Intelligent merge for larger images
- Full size scanning pad with edge guide
- Image editing
- Image manager/browser
- OCR recognition
- TWAIN compliant
- Multiple file formats supported
- Overspeed alarm by LED and buzzer

$\$165^{95}$

Maxmedia TV

Make any TV into a Large-Screen Presentation Monitor

- Connect your PC or MAC to any standard TV(NTSC or PAL); what you see on the monitor shows up on the TV
- Monitor and television both remain active; presenter can use the monitor while audience watches the TV
- Color, brightness and contrast are all adjustable from the Maxmedia TV case
- MAC to VGA adapter included
- Lightweight and portable

$\$179^{95}$

BizCard Reader

The Simplest Way to Manage Your Business Contacts

- Parallel interface connection for easy plug & play
- Background scanning/processing
- Reads cards automatically without interrupting your work
- Built-in database manager for easy search & retrieval
- Automatic link to ACTI, PackRat, Lotus Organizer

$\$175^{95}$

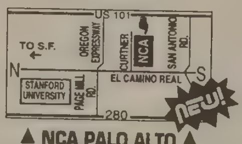
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

Sale Ends 05/28/95

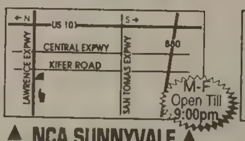
22

DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS



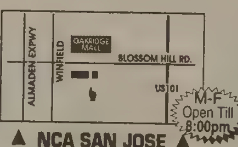
▲ NCA PALO ALTO ▲

3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480



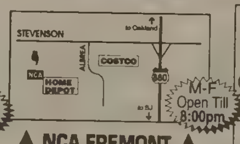
▲ NCA SUNNYVALE ▲

1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420



▲ NCA SAN JOSE ▲

962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610



▲ NCA FREMONT ▲

40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE

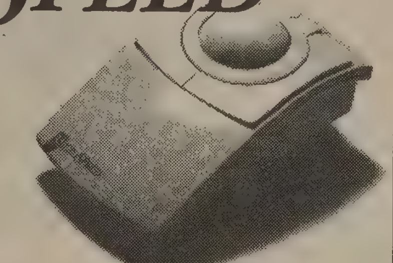
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

*LOWEST PRICE GUARANTEE offer applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantitiy offers, or on bonus or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

HIGH QUALITY UPGRADES

MICROSPEED



- 100% Microsoft mouse compatible
- Includes PrecisionPointer™ driver software that automatically adjusts resolution from 50 to 1000 dpi for quick movement and precise control.

PC-TRAC
TRACKBALL

NEW LOWER PRICE!

Serial Version	$55.95
Bus Version	$88.95
PS/2 Mouse Port Comp.	$55.95

MicroTRAC
TRACKBALL

Serial/PS/2 Version	$49.95
Macintosh Version	$49.95

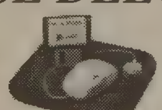
MacTRAC 2.0
TRACKBALL

ALL MACS	$57.95

WinTRAC
TRACKBALL

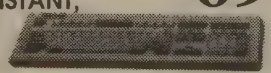
Serial Programmable for WIN	$72.95

MICROSPEED MOUSE DELUXE
Serial version with mousepad & Software $28.95

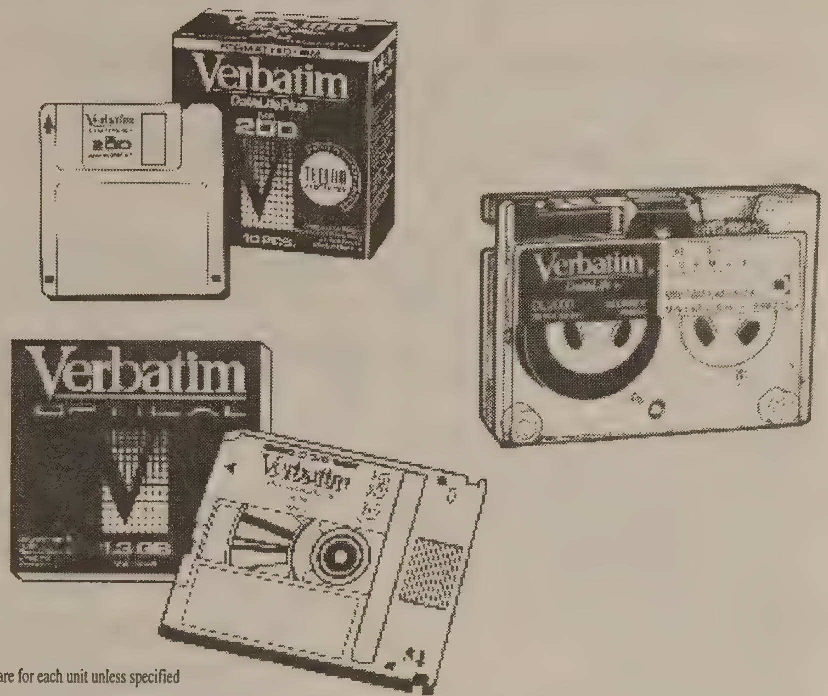


MICROSPEED REPLACEMENT MOUSE
3-Button Serial Mouse (250dpi) $14.95

MICROSPEED 105 KEY MAC KEYBOARD
DELUXE MODEL
4-ADB PORTS, POWER PC READY, SPILL-RESISTANT, TACTLE KEY FEEL, 16% SMALLER FOOTPRINT $69.95



Verbatim
High Quality Reliable Media



Prices are for each unit unless specified

87662 DataLife Extra High Density 3.5" 4MB/ Double-Sided Extra-High Density Diskettes 10pk.	$31.99
87410 DataLife IBM Formatted 3.5" Double-Sided/ High Density Diskettes 10pk.	$6.99
87706 2 Sided/High Density Teflon Coated Formatted 3.5" 10pk.	$7.99
87573 2 Sided/High Density Apple Formatted 3.5" 10pk.	$6.99
90545 230MB 3.5" Optical Disk	$31.99
89616 8mm Tape Drive Cleaning Cartridge X112	$11.99
89615 4mm Tape Drive Cleaning Cartridge	$7.99
87698 8mm 112MB Computer Grade Data Cartridge	$6.99
88195 4mm 90MB Computer Grade Data Cartridge	$7.99
87992 120MB DC-2120 QIC-80 Formated Minicartridge	$10.99
89944 DC-2120 QIC 80 (2Pack)	$20.99
90745 MC3000XL 340MB Cartridge	$19.99
87695 160MB High Density Data 1/4" Cartridge	$13.99

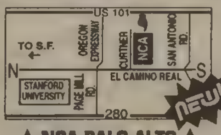
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

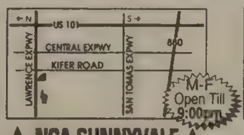
Sale Ends 05/28/95

DISCOVER · AMERICAN EXPRESS · MasterCard · VISA · PURCHASE ORDERS

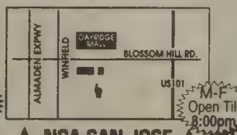
CE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS


US 101
TO S.F.
N
OREGON EXPRESSWAY
CURTNER
NCA
SAN ANTONIO RD.
S
STANFORD UNIVERSITY
PAGE MILL RD.
EL CAMINO REAL
280
NEW!

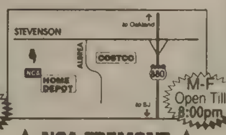
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480


N
US 101
S
CENTRAL EXPWY
KIFER ROAD
LAWRENCE EXPWY
SAN TOMAS EXPWY
880
M-F Open Till 9:00pm

▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420


ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD.
US 101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610


STEVENSON
to Oakland
NCA
HOME DEPOT
ALBRAE
COSTCO
880
to SJ
M-F Open Till 8:00pm

▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

23

"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

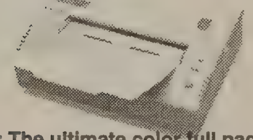
HIGH QUALITY UPGRADES

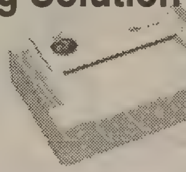
info™

PRODUCTS

Scanning Made Simple

Info Products Teams High-Performance Scanners & Software For The Ideal Windows Scanning Solution





SF6CD: The ultimate color full page, desktop single pass, color scanner with a 30 page auto document feeder. Comes equipped with OmniScan SE, a combination of Caere's powerful Image Assistant, OmniPage Direct OCR, and Delrina's award winning WinFax Pro Lite. With the support of a fax/modem device and a 300dpi printer, the image reader can perform as a plain paper fax machine. Image Assistant provides professional image editing capabilities and OmniPage Direct eliminates the need to retype documents.

- 3-1200 DPI scanning resolution
- Line Art, 256 Gray Scale & 24-bit Color scanning
- TWAIN compatible
- No AC power required
- 24-bit processing
- Access to 16.8 million colors
- Single pass scanning
- Small foot print
- Auto diagnostic installation
- 30 page auto document feed
- Software included:
  - OmniScan SE
  - Image Assistant
  - WinFax Pro Lite

$499.95

SF12C: Image Reader 1200dpi color full page single-pass 24-bit color scanner with image Pals Go LE imaging editor, Photo Album for image compression& storage, Interpreter 3.5 OCR, TWAIN compliant and INFO Technician for no fault installation.

- 3-1200 DPI scanning resolution
- Optical Character Recognition
- TWAIN compatible
- No AC power required
- 24-bit processing
- Access to 16.8 million colors
- Single pass scanning
- Small foot print
- Auto diagnostic installation
- Applications:
  - Desktop Publishing
  - Multimedia
  - Facsimile
  - Word Processing
  - Document Imaging

$299.95

Simply Awesome Features

Who packs 1200 DPI resolution and 16.8 million colors in a Windows scanner with a small footprint? Simple-Info Products! Scan line art, 256 grayscale and true color in a single pass. A built-in-30-page Automatic Document Feed is available.

Simply Advanced Software

Innovative software, like Info Technician, makes everything fast and easy, from installation to scanning images and documents.

Simply Inviting

Take advantage of desktop publishing, multimedia, facsmile support, document imaging and other technologies with our Image Reader Scanners!

Simply Affordable

Get all the hardware and software you need to start scanning right now. Our breakthrough low prices even include drivers for Windows systems!

Info, Simply the best scanning value!

Supra Corporation™

SupraFAXModem

14,400 bps Fax, 14,400 bps Data/V.42bis / MNP5
57,600 bps throughput/ Class 1 Fax, Caller ID

UNLOCK THE WORLD OF DESKTOP COMMUNICATIONS™

EXPRESS

14.4 Plus Internal

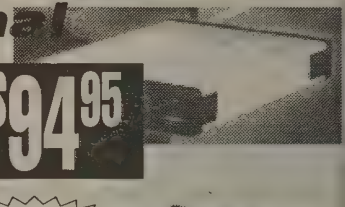
14.4 Fax/Modem for PC

Software Included:
COMit™ (Windows)
FaxTalk® (Windows)
CompuServe® Information Manager

NEW!

$76.95

14.4 Plus External

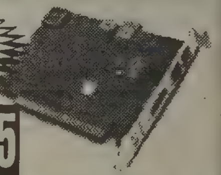


14.4 Fax/Modem for PC

Software Included:
COMit™ (DOS & Windows)
WinFax Lite™ (Windows), FaxTalk® (DOS)
Cables & Manuals

$94.95

28.8 Internal



V.34

28.8 Data 14.4 Fax for PC

Software Included:
COMit™ (DOS & Windows)
WinFax Lite™ (Windows), FaxTalk® (DOS)
Cables & Manuals

$179.95

External 28.8 for PC $199.95

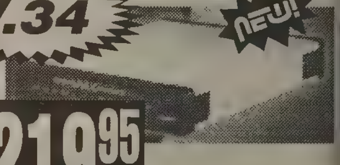
14.4 Ext. MAC

14.4 Fax/Modem for MAC

- Top-Rated Data/Fax Software.
- Easy to Install, Easy to Use.
- Five Year Warranty
- Cables and Manual

$99.95

28.8 Ext. MAC



V.34

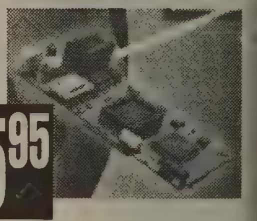
NEW!

The Fastest Modem for the MAC
28.8 Data/14.4FaxModem for MAC

- Software Included:
  Microphone LT, FAXcilitate™
  CompuServe Information Manager™
- Cables and Manual.

$219.95

14.4PB Int. MAC



14.4 Fax/Modem for PowerBooks

- 14,400bps FAX/DATA
- V.42bis/MNP 5 • 57,600 bps Max Throuput
- Caller ID, SilentAnswer™
- Works in PowerBook Models 100-180
- Software Includes:
  °Microphone™ LT
  °FAXstf™, °Compuserve
  °Information Manger™, °ARA Scripts • Manuals

$195.95

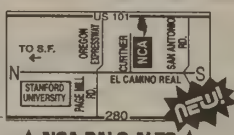
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

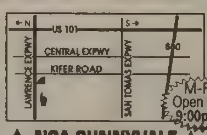
Sale Ends 05/28/95

DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

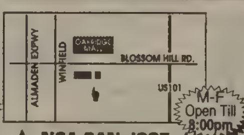
E SUBJECT TO CHANGE WITHOUT NOTICE LIMITED STOCK ON SPECIAL ITEMS NOT RESPONSIBLE FOR TYPE OR ERRORS



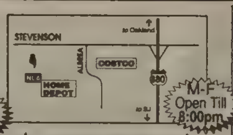
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

24

"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

FAX/MODEMS

TDK

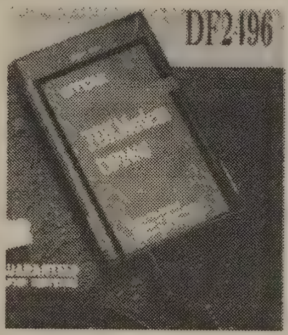
THE MOST ADVANCED, HIGH QUALITY PCMCIA CARDS AVAILABLE.

PCMCIA DATA/ FAX MODEMS

2400/9600 BPS PCMCIA

DATA/FAX MODEM

- 2400 BPS DATA & 9600 BPS FAX
- 16C550 UART FOR HIGH PERFORMANCE WINDOWS APPLICATION
- PCMCIA APPROVED 7-PIN CONNECTOR SYSTEM
- FREE CARRYING CASE
- TOLL FREE TECHNICAL SUPPORT
- 5 YEAR WARRANTY



INCLUDES QUICKLINK II SOFTWARE FOR DOS & WINDOWS!

$55.95

14,400 BPS PCMCIA

DATA/FAX MODEM

- 14,400BPS DATA & FAX TRANSFER RATES
- PCMCIA APPROVED 7-PIN CONNECTOR SYSTEM
- FREE CARRYING CASE
- TOLL FREE TECHNICAL SUPPORT
- 5 YEAR WARRANTY

INCLUDES QUICKLINK II SOFTWARE FOR DOS & WINDOWS!

$179.95

28,800 BPS PCMCIA

DATA/FAX MODEM

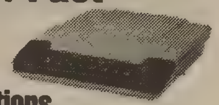
- 28,800BPS DATA & FAX TRANSFER RATES
- INCLUDES ULTRA HIGH SPEED WINDOWS INTERFACE
- CELLULAR READY WITH MNP10 ADVERSE CHANNEL PROTOCOL
- PCMCIA APPROVED 7-PIN CONNECTOR SYSTEM
- FREE CARRYING CASE
- TOLL FREE TECHNICAL SUPPORT
- 5 YEAR WARRANTY

INCLUDES QUICKLINK II SOFTWARE FOR DOS & WINDOWS!

$289.95

Hayes®

Optima 28.8 V.34 Fast



The Fastest Hayes™ Modem For Business Communications.

- ▶ 28,800bit/s Data & 14,400bit/s Group 3
- ▶ Includes 14,400bit/s (V.32bis) & 9600 bit/s (V.32)
- ▶ Error control V.42 & data compression V.42bis
- ▶ Includes FREE Smartcom for Windows LE & Fax software

$419.95 External

Accura 28.8 V.34

Fast Fax/Modem Int./ext..$179.95/$210.95

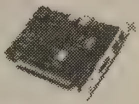
Accura 14.4 V.42

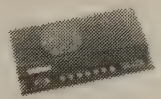
Fast Fax/Modem Int./ext.....$88.95/$104.95

HIGH SPEED FAX/MODEMS

USRobotics®

The Intelligent Choice in Data Communications





SPORTSTER 14,400 V.32/V.42

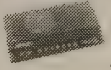
WITH QUICKLINK LITE SOFTWARE

14.4 INTERNAL for PC **$88.95** **14.4 EXTERNAL** for PC **$114.95**

14.4 PCMCIA Fax/Modem Sportster **$185.95**

28.8 PCMCIA Fax/Modem Sportster **$365.95**

mac&fax



14.4BPS **$119.95**

28.8 V.34......$259.95

28.8..............$269.95

Courier 28.8 V.34....................Int. $383.95 Ext. $415.95

28.8 Sportster V.34.................Int. $217.95 Ext. $235.95

Megahertz™ 14,400 PCMCIA FAX MODEM

Linking Your Worlds

INCLUDES XJACK

- 14.4bps. V.42/V.42bis
- Auto Installation
- Hot Insertion
- Cellular Compatiblity
- Includes XJACK,a retractable RJ11 connector that pops out to hook into a standard phone cord
- Fax Software Included

NEW!

$189.95

28.8 PCMCIA FAX MODEM.................$399.95

GSI Model 32 16-Bit Dual 16550 UART Multi-Port IDE Card

- 16-Bit ISA compliant with new enhanced IDE & fast ATA standards
- Supports up to two IDE drives
- Supports new high-capcity IDE hard drives
- High speed 1MB/sec. floppy interface(up to 4 floppy drives)
- Dual 16550 UART serial ports & one bi-directional parallel port

IDE **$109.95**

WONDER 16550 IDE CARD

2 IDE DRIVES/2 FLOPPY
2 HIGH SPEED 16550 SERIAL PORTS
1 PARALLEL PORT / 1 GAME

WHAT EVERY EXTERNAL 14.4 MODEM NEEDS

$69.95

QUICKPATH

PORT-FOLIO16 550

2 IDE HD, 2 Parallel, 4 Serial, 4 Floppy, 1 Game
13-Port Super I/O Card,
4 INTEGRATED NS16550 HIGH SPEED UARTs

$119.95

NCA Computer Products™

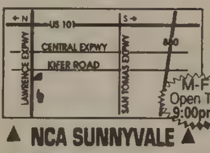
Your Computer Upgrade SUPERMARKET™

Sale Ends 05/28/95

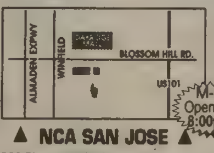
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

US 101
TO S.F.
OREGON EXPRESSWAY
CURTNER
NCA
SAN ANTONIO RD.
N
S
EL CAMINO REAL
STANFORD UNIVERSITY
PAGE MILL RD.
280
NEW!

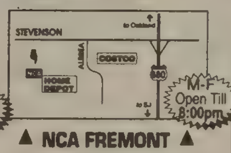
▲ NCA PALO ALTO ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expwy & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA
CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

*LOWEST PRICE GUARANTEE offer applies only to items which are in stock at an authoized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classifie

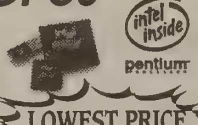
(25)

BOARDS, RAM, ETC...

MEMORY SIMMS

MOTHERBOARDS

intel. CPUs



486DX-33MHz
486DX2-50MHz
486DX2-66MHz
486DX4-100MHz
Pentium 60MHz
Pentium 66MHz
Pentium 75MHz
Pentium 90MHz
Pentium 100MHz

LOWEST PRICE GUARANTEED*

AMD CPUs

AMD486DX2-66MHz
AMD486DX2-80MHz
AMD486DX4-100MHz

IBM COMPATIBLE

256X9	80ns	3Chip	$Call
1MBX9	80ns	3Chip	$Call
1MBX9	80ns	9Chip	$Call
1MBX9	70ns	3Chip	$Call
1MBX9	70ns	9Chip	$Call
1MBX9	60ns	3Chip	$Call
1MBX9	60ns	9Chip	$Call
4MBX9	80ns	9Chip	$Call
4MBX9	70ns	3Chip	$Call
4MBX9	70ns	5Chip	$Call
4MBX9	70ns	9Chip	$Call
4MBX9	60ns	9Chip	$Call
16MBX9	70ns	9Chip	$Call

72-PIN SIMMS

2MB 604-70ns/60ns	$CALL
4MB 1X36-70ns/60ns	$CALL
8MB 2X36-70ns/60ns	$CALL
16MB 4X36 70ns/60ns	$CALL
32MB 8X36 70ns/60ns	$CALL

PCMCIA

FlashCard

PCMCIA Mass Storage For Mobile Computers

NEW •Lower Prices•

Seagate

SunDisk The Solid Advantage

☐ **HP 95LX**
☐ **GRiD Convertible 386/486**

KIT INCLUDES:
FlashCard, Communication Cable, Software Drivers

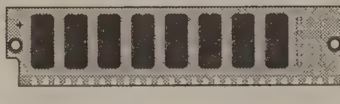
2.6MB FlashCard Kit	$259
5.2MB FlashCard Kit	$359
10.4MB FlashCard Kit	$469

☐ **HP 100LX/OmniBook**
☐ **EO Personal Com. 440/880**
☐ **NCR 3170 Safari***

FlashCard Only, No Software Needed
* Kit Includes FlashCard & Software

2.6MB FlashCard	$219
5.2MB FlashCard	$299
10.4MB FlashCard	$459
20MB FlashCard	$799

Macintosh



1MBX8	80ns	2Chip	$Call
1MBX8	80ns	8Chip	$Call
1MBX8	70ns	2Chip	$Call
1MBX8	70ns	8Chip	$Call
2MBX8	80ns	2Chip	$Call
4MBX8	80ns	8Chip	$Call
4MBX8	70ns	8Chip	$Call
4MBX8	60ns	8Chip	$Call
4MBX8	80ns	II-FX	$Call
16MBX8	70ns	8Chip	$Call

32-BIT FOR QUADRA 800, CENTRIS, LCIII & POWER PC's

2MB Module	$Call
4MB Module	$Call
8MB Module	$Call
16MB Module	$Call

MAC MEMORY INSTALLATION

Installation $15
(excluding Powerbooks)

POWERBOOK MEMORY

6MB Module **(160/180)**	$CALL
8MB Module **(160/180)**	$CALL
10MB Module **(160/180)**	$CALL
6MB Modules **(140/145/170)**	$CALL

LASER PRINTER MEMORY

HP laser Jet 4 & 4M HEWLETT PACKARD

4MB	$Call
8MB	$Call

HP Laser Jet IIP, III, IIID HP IIIsi
OTHER LASER PRINTERS
PANASONIC P4410/4430 Printers
Compaq Page MRQ Printers EPSON Action II
Printers OKI 400 Printers & NEC Printers

CACHE MEMORY

32X8-20ns $5.29

8X8-20ns	$CALL
8X8-15ns	$CALL
32X8-15ns	$CALL
64X8-20ns	$CALL
64X8-15ns	$CALL

HEWLETT PACKARD
Laser Printers, DeskJets Pritners
PRINTER ACCESSORIES:
TONER CARTRIDGES · TRAYS / FEEDERS
MEMORY MODULES

MYLEX

Ultra Reliable, High Performance MotherBoards

CPU Sold seperately

MGI-486: 486VLB

2-VLB Slots, 256K Cache (up to 512K)
0MB up to 64MB RAM uses 30pin and 72pin SIMMS
Green PC, ZIF Socket, SIS Chipset, Award BIOS
$129

MPX-486: 486PCI NEW!

2 Enhanced IDE on Local Bus, 3 PCI slots, 5 ISA Slots
256K Cache, 0MB up to 128MB RAM uses 72pin Simms,
Green PC, ZIF Socket, SIS Chipset, Award BIOS
$139

MPE-PNTM: Pentium 60/66Mhz EISA/PCI

7 EISA/3 PCI slots, 256K Cache upto 512KB,
0MB up to 192MB RAM uses 72pin Simms
ZIF Socket, Mercury Chipset, AMI BIOS,Full Size Board
Fast SCSI-II PCI, Serial/Paralial, IDE, FD Controller Built in
$599

MGP-PNTM: Pentium 90Mhz PCI

3 PCI, 5 ISA slots 256K Cache up to 1MB,
0MB up to 128MB RAM uses 72pin Simms
ZIF Socket, SIS Chipset, Award BIOS
GREEN PC
$235

MDP-PNTM: Dual Pentium 90Mhz PCI/EISA NEW!

4 PCI, 6 EISA slots, 256K Cache,
0MB up to 512MB RAM uses 72pin Simms
ZIF Socket, Neptune Chipset, AMI BIOS
1 IDE, 2 Serial, 1 Parallel, 1 Floppy
$859

ASUS
NCA's High Quality
PCI 486 Motherboard

- Three 32bit PCI Slots
- Four 16bit ISA Slots
- Intel PCI 486 Saturn Chipset
- 256K Cache (up to 512K)
- **Integrated NCR 53C810 32 bit PCI SCSI Controller**
- Memory Upto 128MB
- ZIF Socket for future upgrade
- Integrated Hi-Speed Serial Ports/1Parl.

$269
CPU Sold seperately

NCA's High Quality **ASUS**
VLB 486 Motherboard

- 2 VLB SLOTS
- DX4 COMPATIBLE
- 128K CACHE EXP. TO 1MB
- USES 72-PIN SIMMS
- **SIS CHIPSET, AWARD BIOS**
- ZIF Socket for future upgrade

$119
CPU Sold seperately

ASUS 486 PCI/VLB ON-BOARD PCI/IDE CONTROLLER.. $155

NCA's High Quality **Bioteq**

486DX-VESA LOCAL BUS

- 3 VLB SLOTS
- **256K CACHE** • 0MB EXP. TO 64MB RAM
- ZIF SOCKET • BIOTEQ CHIPSET
- USES 32 PIN OR 72 PIN SIMMS
- AMI BIOS • SUPPORTS DX4

CPU Sold seperately
128K CACHE VERSION...$85
$109

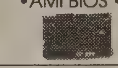
486DX-VLB/PCI BUS

- VLB & PCI SLOTS
- **256K CACHE** • 0MB EXP. TO 64MB RAM
- ZIF SOCKET • BIOTEQ CHIPSET
- USES 32 PIN OR 72 PIN SIMMS
- AMI BIOS • SUPPORTS DX4

CPU Sold seperately
$125

PCI Pentium 75/90/100

- 3-PCI SLOTS
- **256K CACHE** • 0MB EXP. TO 64MB RAM
- ZIF SOCKET • BIOTEQ CHIPSET
- **Built-In IDE I/O**
- USES 72 PIN SIMMS
- AMI BIOS • SUPPORTS DX4



$195

NCA's Premier/PCI' **American Digicom**
PCI Pentium Motherboard

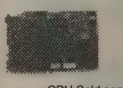
- Itegrated SMC37C665 Super I/O Chip
  Providing: Two FIFO Hi Speed Serial Ports/1 parl.
- Three PCI Local Bus PCI-Providing a high Bandwidth Data Path
- Five ISA Slots (includes 1 Shared ISA/PCI Slots)
- Intel Mercury PCI Chip Set
- 256K Direct Mapping, write back second level Cache
- Integrated PCI IDE port

CPU Sold seperately
$249

Pentium 60MHz (no CPU) 256K CACHE VLB Motherboard .. $229

PCI Pentium 75/90/100MHz

- 256K Cache expandable to 1MB
- 4 PCI slots
- Faster SIS Chip Set
- ZIF Socket
- Uses 72-Pin Simms
- Green PC
- **D-COM**



CPU Sold seperately
$179

NCA's Premier/PCI' **Triton Chipset**
PCI Pentium 75/90/100/120

- 3-PCI SLOTS
- **Triton chipset**
- **256K CACHE**
- 0MB EXP. TO 128MB RAM
- ZIF SOCKET
- USES 72 PIN SIMMS
- Intergrated PCI IDE port

$259

NCA's High Quality **PLATO**
90MHz Pentium PCI-90 Super Motherboard

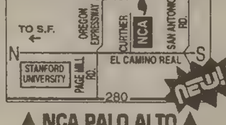
NEW LOWER PRICE!

- 256K Cache
- Uses 72-Pin SIMMS
- High Speed 16550 Serial Port
- PCI & ISA IDE Builtpin
- 3-PCI Slots
- Built-in Floppy Support
- Intel Chip Set & Board
- Made in Ireland
- CPU Cooling Fan...$29

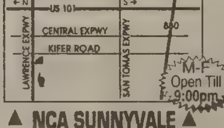
CPU Sold seperately
$325

NCA Computer Products™
Your Computer Upgrade SUPERMARKET™
Sale Ends 05/28/95

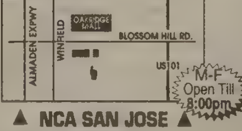
DISCOVER · AMERICAN EXPRESS · MasterCard · VISA · PURCHASE ORDERS



▲ **NCA PALO ALTO** ▲
3825 El CAMINO REAL (Curtner & El Camino)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(415) 493-2444 Fax (415)-493-2480



▲ **NCA SUNNYVALE** ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax (408) 739-2420



▲ **NCA SAN JOSE** ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax (408) 363-4610

STEVENSON
to Oakland
ALBREA
COSTCO
NCA
HOME DEPOT
880
to SJ
M-F Open Till 8:00pm

▲ **NCA FREMONT** ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax (510) 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

(26) E SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS

"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

not into the games business; we're not trying to do Doom or Heretic or one of these products—it's a different world.

In both cases, there's an incredible opportunity. One thing that's different is I think I'm wiser today than I was at the time. Some of the temptations—oh, let's build everything, let's grow, let's move into a fairly alien area like buying Ashton-Tate—we'll resist those.

Also, I think the incredible saga of Lotus and this lawsuit, fighting for five years on a position of principle, was the right thing to do. It's something that's really hurt our company a lot. But to some extent, that fight is hopefully behind us, and we hope that kind of sets the tone for intellectual property and that this will not repeat itself.

We certainly would have done some things slightly differently—the first court in Boston, Judge Keeton's court, obviously was...

In the pocket of [Lotus CEO] Jim Manzi?

[*laughs*] I didn't say that!

We should have done something.

You did try to get a change of venue...

Well, we tried, but I think that maybe we should have been more aggressive. We were playing this in a very ethical way, and we were hoping that the original court would find a balanced judgment, but we didn't have it.

So I think we're much wiser there.

The other area I think is different, where I think there's more wisdom, is the understanding of the process of the growth of the company. The idea of finding people and setting up a clear mission at first, so we don't err from that.

When Borland acquired Ashton-Tate, a lot of the original values in the company kind of disappeared. We became a much bigger entity, and it took a while—up until about six months ago—to just shrink it back to something we felt was more manageable.

From an industry standpoint, conditions are similar and different. Distribution channels are now much more receptive to simple component software because of what's happening with the Internet. There's something that's happening today that wasn't happening at the time, which is the convergence of computers and communications. That's, I think, something that wasn't happening at the time. What was happening at the time was the explosion of the personal computer in business.

Now the two factors that we see are the personal computer in the home, and digital communications and computers merging together. And I think those factors will help build Starfish.

Do you see little mobile communicators like Newtons and Envoys as an opportunity? Right now you're just in Windows, but in the future, a portable Sidekick?

There's not per se today a portable Sidekick, but there's a connection between a Sidekick on Windows and a Casio or a Sharp Wizard.

But a product like your favorite pager—[*waves pager*] the next generation of these is a two-way system and needs a hub. Part of what we're looking at is creating a hub in Windows with Sidekick. We believe when you go to two-way paging, this is much cheaper than cellular technology, because it's radio wave.

The latest ones do acknowledgement and send-back stuff—you can program them to say several things—yes, no, etc.; or when the person sends you a page, part of their message sends you an assignment of each one of these keys, so when you press one of these keys it means "Yes, I agree with the meeting," "No, I don't agree."

So it supplies its own answers?

Yes, because the answer is part of the question.

That's the next generation. Those pagers become great personal communicators, and I think the explosion is going to come from this side tied to kind of a PC-type hub; more, in my opinion, than a Newton, which is a nice device, but after all, how many devices are you going to have?

Our vision is yes, there's going to be little devices, but to a lot of people these pagers are cheap and communicate in an extremely efficient way. Envoy and all that builds on cellular technology, and cellular is expensive.

We believe that pagers, for example, are going to be a huge factor in home computing. Abstract from home computing, educational software, and those kinds of stuff, that's fine, that'll be very successful. But what are people going to *do* with their home computers?

I think people will want to give these pagers to their kids, to be able to page their kids, know where their kids are—because the next generation of these also has GPS or some locating device so you know where people are. We think there's going to be an explosion of that, and cellular phones are way too expensive for people to give to their kids. You're not going to give your kid a cellular phone, but you might give him a pager.

I think that's a very important piece of what we're doing. When we say "personal communicator," we're talking about making it easy to send something. You're in Sidekick, and "Oh, I want to blast Dennis! Bang!" It knows you've got one of those. It blasts it directly out. It's very simple and immediate. If you acknowledge it, that shows up on my screen. Then if I'm not around it automatically knows where I am and automatically redirects it to my pager.

There's a study that was made about these devices that include a locating system. They found out that most people loved the idea, except males between the ages of sixteen and forty. They absolutely did not want to be located. So there's a lot of implications of all this—Big Brother Is Watching You kind of stuff.

I think the next ten years are going to be very interesting. A lot of people make a lot of the Internet, and that's really important, but I think there's a whole other world of communicating besides setting up your home page and all these other things, which will always be kind of geekish. There's a geeky quality to that—setting up your home page, and people saying your home page is like a porch, and you make it nice like your house...

Well, only a certain category of people are going to spend a lot of time setting up their home page. I have something else to do other than setting up my home page, and I'm pretty geeky. I'm a developer, right, but I'm not sure I want to spend a lot of time doing that. But I certainly will spend time communicating with others and doing these things in Sidekick.

Plus, many times the Net's totally useless. It's great for surfing and having fun; it's an exploring device. Very few times do you do anything really useful on the Internet.

Taking this in a different direction and going back to the Borland days—did you like running a large company?

There's positive sides and negative sides to that.

The positive side is that you have a lot of latitude and a lot of budgets to do interesting things, things that you wouldn't do in a small company. The negative side is that because you have all these budgets, you tend not to have the same sense of urgency and pressure to make things happen. The *big* negative side is that you get consumed by things that are not necessarily what's most important, but sometimes what's most urgent.

But there's both sides of the story. There's things that Borland the company could do, like Delphi. If we wanted to build Delphi here, we could not do that. This is a big project, a three-to-four-year project with fifty people. To do that kind of software, you need a large company. That was the big advantage. To do Sidekick is more difficult in a large company because you don't want to do things in a large way. You want to be minimalist.

So I don't think large companies will be great at Slimware. Large companies will be great at building Novell PerfectOffice and Microsoft Office and products such as Delphi and Borland C++ or Visual C++. Those are the projects that fit a big company.

It was an interesting experience, though. That was a big multinational company. The advantage of a large company is also a multinational presence, places all around the world where you can actually build and sell software.

However, with Starfish we're already present in Japan—we immediately created a presence in Japan with a Japanese version of Sidekick, for Kanji Windows. Windows is not the clearly dominant operating system in Japan, but we think that within two years Windows will dominate.

Does the Mac make more sense as a market in Japan?

Yes, the market share of the Macintosh in Japan is much higher than the market share of the Macintosh anywhere else in the world. Macintosh has about 25% market share. One of the reasons is that Apple did a good job early on building a Macintsoh market, and Windows was late.

So to some extent Japan shows what Macintosh could be if it was managed in a competitive manner with Windows. They've had tremendous success in Japan, and they could do better. They could take it to 40%.

How do you handle localization issues when you're a small company like Starfish?

Well, we handle them carefully and efficiently. To build a Japanese version of Sidekick takes two engineers, so we have two engineers doing it. In a company the size of Borland, it's a project for fifteen people!

Which includes managers and people to spin information up and down the corporate ladder?

Exactly. You can do the same things on a much smaller scale with at least the same level of efficiency. So the challenge is to keep it in the right way.

What's your relationship with Borland right now?

Well, I'm the chairman of the company, and so I'm involved in everything that has to do with strategic partnerships, anything that has to do with working with the Novells of this world and all of that. I'm involved with anything that has to do with the technology, the vision, the product strategy, with what the company does. That's what I'm involved with. But I don't run day-to-day operations. Gary Weitzel's doing that.

You're still a stockholder?

Yeah, I'm still probably the largest stockholder of the company.

So you still want that company to do great?

Oh, absolutely. Not only do I want Borland to do great, but I think that the products and technology Borland has built with Delphi, etc. are extremely important to the industry. Delphi really makes it possible for three or four people in a garage to build the next hit.

That's not only my Borland hat; it's also a matter of growing the industry and making sure that ten years from now there's lots of software companies. It sounds kind of utopian, but I think it's very important. That's what led the PC revolution, and it's seemed like we're going to this concentration into large companies. I think that opening it up and making sure there are lots of software companies and lots of software creativity out there is very key.

The CD-ROM industry seems to be developing along the same lines as the record industry, with a lot of people doing individual products and finding a distributor. Do you see a lot of that happening in the software industry the same way?

Yeah, I think you'll have a full-service turnkey type of publisher, and you'll have people who set themselves up as independent publishers.

Would Starfish do something like that, if some guys got going with Delphi, for instance, and came up with something great?

Yeah, absolutely. We're not counting on that, but if some guys come up with something that fits in our strategy and our vision and are people we want to work with, we would entertain that.

Now our vision and mission is not that—our vision and our mission is to build ourselves a lot of this stuff. But we would welcome that, absolutely, to be a publisher for these guys.

I think you'll get both sides. You'll get guys who say, "Hey, we've got distribution, we've got a name, we'll do that." And then there's the other side of the business, which is "We just want to develop something; we want somebody to distribute it, and we want to have royalties." Those guys will do well too, provided they find the right publisher.

You'll get new labels, because yeah, sure, they can go to Microsoft, but there are pluses and minuses to going with a product that you've developed to Microsoft. Or you could go to Starfish or somebody else.

There's always pluses and minuses. In a large company you can get lost, a lot of people get to see your software, so how do you protect your ideas when it's a large company?

You know that a small company makes a commitment to your software; it's an important commitment, they want it to succeed and you don't get lost. The downside is that you maybe don't have the power of a Microsoft getting behind something.

So how did Microsoft's acquisition of Fox play out vis-à-vis your acquisition of Ashton-Tate?

Well, they really pulled the rug out from under our feet.

The first thing we did when we acquired Ashton-Tate was to announce that we were dropping all the lawsuit stuff [*Ashton-Tate was, at the time, engaged in suing pretty much the entire dBASE clone community*]. Immediately as we did that, Microsoft went out and bought FoxPro. Which was fine, because we decided not to sue them...

And then they dropped the prices dramatically. MicroWarehouse ads have a FoxPro competitive upgrade of $19.95. That really pulled the rug out from under Borland, because from a $695–795 product, we're talking about a sub-$100 product. That made it very difficult; they really played hardball.

So where does all that stand now? What's happening with Borland's database products? Are they being redefined specifically as application generators?

A lot of that is the case. If you look at the latest *Infoworld*, it's got a comparative review of programmable databases, and they decided that Paradox was the best one by far, over Microsoft Access and all the others. Paradox is

SPRING BLOWOUT SALE!

Hurry Now–Quantities Are Limited

LOGITECH Factory Outlet

Save on returns, factory refurbished, cosmetically blemished, or last year's models!

Get Logitech quality mice, scanners, camera, and sound products at the absolutely lowest prices. All merchandise is fully functional, has been factory inspected, and comes with warranty. Products are new, returns, or have minor cosmetic blemishes.. So hurry now, at these great prices they won't last.

MICE

3-Button Mouse
- Hi-Resolution
- Fits in Left or Right Hand
- Serial Interface
- Factory Refurbished

reg. $29.95 **$9.95**

Limited Quantity

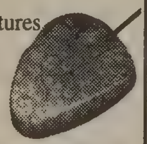
Logitech Kidz Mouse
- Great for Kids and Adults
- PC & Mac
- Factory Refurbished

reg. $29.95 **$9.95**

MouseMan
- 400dpi resolution
- Shaped to fit the hand
- Serial interface
- Includes Software
- Mac Version Available
- Factory Refurbished

reg. $69 PLEASE CALL

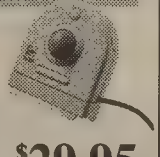
MouseMan Sensa
- Select From 4 Different Colors & Textures
- 400dpi Resolution
- Serial Interface
- Factory Refurbished



reg. $75 **$29**

TRACKBALLS

TrackMan Portable
- Ideal for Portables
- Clamps to side of keyboard
- Thumb operated 3-button design
- Serial interface or PS2 adaptable
- Includes Software
- Factory Refurbished



Starting at **$29.95**

TrackMan Voyager
- Hot new portable trackball
- Versatile Laptop Notebook mounting
- PS2 Interface
- Factory Refurbished

reg. $99.95 **$39.95**

TrackMan for Mac
- Last year's version
- 3-Button
- Hi-Res thumb ball design
- Factory Refurbished

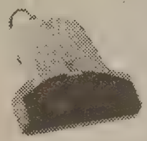
Starting at **$29.95**

SCANNERS

ScanMan Model 32
- 32 Gray Scale
- 100-400dpi
- Includes Windows Software
- Factory Refurbished

reg $129 **$29.95**

ScanMan 256
- 256 Gray Scale
- 100-400dpi
- Graphics & OCR Compatible
- Includes Windows Software
- Factory Refurbished

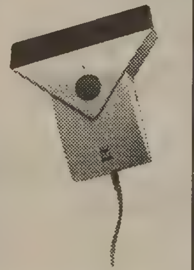


reg. $199 **$99.95**

ScanMan Easy Touch
- Parallel interface, no board required
- 256 Gray Scale
- 100-400dpi
- Great for portables
- Includes Windows Software
- Factory Refurbished

reg. $249 **$139.95**

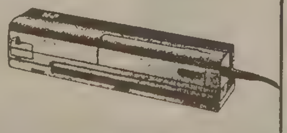
ScanMan Color
- For Windows
- 24-bit 16.8M Colors
- 100-400dpi
- Perfect for all your scanning needs
- Includes Windows Software
- Factory Refurbished



reg. $379 **$149.95**

ScanMan PowerPage

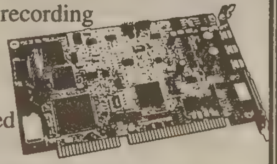
The complete integrated scanning, faxing, and copying solution.
- Works with desktop and portable systems
- One button scanning, faxing, and copying
- Easy to install–plugs into parallel port
- 256 gray scale
- Includes FotoTouch Color image editing, OmniPage OCR Software
- Return or Factory Blemish



reg. $499 **$299.95**

SOUND BOARDS

SoundMan Wave
- Wave Table synthesis
- 16-Bit CD-quality recording & playback
- SCSI Interface
- Includes Software
- Factory Refurbished



reg. $299 **$89.95**

ENTERTAINMENT

Wing Man Joystick
- Hot New Model
- 2-Button, with throttle control
- Fly it meaner, harder and faster!
- Factory Refurbished

reg. $39.95 PLEASE CALL

Wing Man Extreme Joystick
- 4 way view switch
- 4 Buttons for high performance flying
- The ultimate joystick
- Factory Refurbished

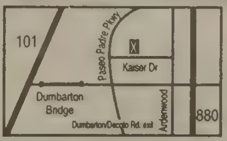
reg. $59.95 PLEASE CALL

Logitech Cyberman™ 3D Controller

Cyberman is a revolutionary input device for hard core gamers. It allows you to move freely in 3 dimensions.
- Works with 2D or 3D games
- Pulsating tactile feedback
- DOS or Windows
- Return or Factory Blemish

reg. $99 **$29.95**

LOGITECH Factory Outlet
6607 Kaiser Drive•Fremont, CA 94555
Hours: M-F 11-6 Sat 10-3
Visit or Order Direct
(800) 936-0018
(510) 713-5200

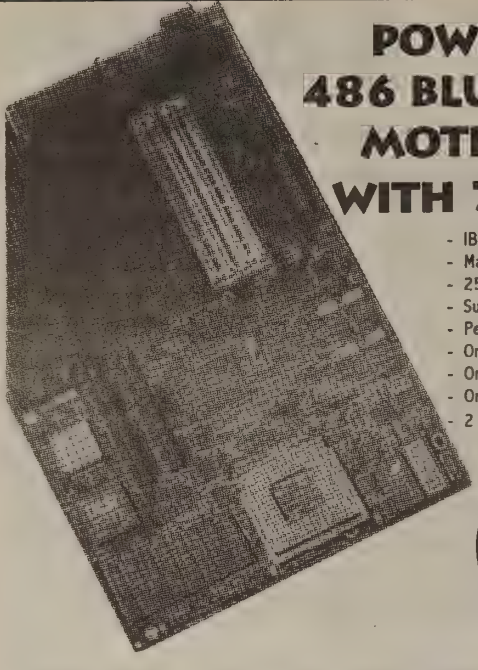


Software and Manuals sold separately, and are available for all products with hardware purchase.
All sales final. 60 Day Warranty Included. Prices Subject to Change. Not responsible for typographical errors.
Extended service contracts available. Quantities limited to stock on hand.

From the East Bay, take the Dumbarton Bridge exit off the I-880. Take the Ardenwood exit and turn right on Ardenwood. Turn left on Kaiser Dr. You'll find us located to your right at 6607 Kaiser Dr.

From the West Bay Area, take the Dumbarton Bridge and exit at Paseo Padre. Turn left and pass over the freeway, then right on Kaiser Dr. You'll find the Logitech Factory Outlet located on the left side of the street at 6607 Kaiser Dr.

POWERFUL IBM
486 BLUE LIGHTNING
MOTHERBOARD
WITH 75 MHZ CPU



- IBM Made CPU w/16KB Internal Cache
- Math Co-Processor Installed
- 256K Cache Memory, upgradable to 512 K
- Supports up to 64 MB RAM (72 pin SIMMs)
- Pentium OverDrive P24T Ready ZIF Socket
- On Board VLB *Enchanced* IDE Controller
- On Board Two UART16550 Serial Ports
- On Board Bi-direction and ECP Parallel Port
- 2 VESA Local Bus Slots, 7 ISA Slots

ONLY
$229.00
Limited Quantity Offer.

Diamond Stealth 64 VLB Video w/2 MB	$185.00	*SCSI-2*/IDE/Floppy/UART16550 I/O VLB	$138.00
Trident 9440 VLB Video w/1 MB	$ 75.00	Sound Blaster 16 Basic	$ 80.00
1x32 (72 pin) 4 MB SIMMs 70ns	$154.00	CD-ROM Drives (2X, 3X, 4X)	$ CALL
14,400 Fax Modem *w/Voice Capability*	$ 70.00	Cables and Accessories	$ CALL
Wireless Mouse w/Rechargeable Base	$ 35.00	CD-ROM GAMES (Myst, Outpost, ...)	$ CALL
540 MB IDE Hard Drive	$200.00	*Complete System (Build to Your Need)*	*$ CALL*

To order call: 1-800-275-1668

SEEWHY COMPUTER SYSTEMS
1424B South Azusa Ave, West Covina, CA 91791
Tel: (818) 916-1088 Fax: (818) 916-1080
Email: SEEWHY88@AOL.COM

Prices do not include tax, nor shipping and handling charges. Prices & availability subject to change. All prices reflect 1% Cash Discount. All sales are final. 15% restocking fee on approved return items.

FREE SEMINARS

the Certification advantage

800.LAN.TEACH

WESTCON is offering FREE SEMINARS on:

Microsoft SOLUTION PROVIDER
Authorized Technical Education Center

MICROSOFT SYSTEMS ENGINEER
JUMPSTART TECHNOLOGY TRAINING

CERTIFIED NOVELL ENGINEER (CNE)
CERTIFICATION TRAINING

Novell Authorized Education Center

Lotus
Authorized Education Center

LOTUS CERTIFIED NOTES
ADMINISTRATOR, CONSULTANT and SPECIALIST
CERTIFICATION PROGRAM

Call 800-LAN-TEACH today for dates and times in your area.

THE CENTER FOR ADVANCED NETWORKING
WESTCON
North America's Largest Network Training Provider
LOS ANGELES * SANTA ANA * SAN DIEGO * SACRAMENTO * SAN JOSE

Philippe Kahn...*continued*

one of the best products out there.

dBASE is probably the best product for the XBASE community. The XBASE community in the US has shrunk; in Japan or in Germany, it's still very important.

But the size of those businesses has decreased. The desktop database business for Borland is probably a sub-$100 million business.

Where have the customers gone—migrated up to Oracle and Sybase?

No, I think they're there, the pricing has just gone down. The units are actually pretty high, but the dollars are much less. There's been some competiton from Access—Microsoft established itself. There's still a reasonable number of units, but the prices have shrunk, and that changes the business.

It's a business that could have been a $400–500 million business, and it's now a sub-$100 million business. Ultimately it'll be a healthier business, very streamlined, etc., but that's been tough competition.

If you had it to do over again, would you acquire Ashton-Tate?

With 20/20 hindsight, the answer would be no, but that's always easy.

I think the strategy at the time was "Well, if we own Ashton-Tate, we will be bigger and stronger, and Microsoft is getting much stronger..."

I think that was a mistake. The strategy was not to be bigger and stronger; the strategy should have been "Let's be focused and do what we do best."

But, you know, you learn from that.

That was a big lesson.

How have the last couple of years been on you?

I think the last two years have been tough, for one precise reason—the criticism of the CDs, the criticism I got for continuing the Lotus lawsuit. We took this position of principle that we would not give in, because the issues that Lotus was bringing up were wrong, and if Lotus prevailed and we did not win an appeal on this, the whole industry would be seriously screwed. Because compatibility and a clear definition of what is copyrightable and what is not is absolutely key to this industry.

Lotus was contending, essentially, that chord changes were copyrightable. Not that software's like music, but if chord changes would be copyrightable, when's the next time you'd write a new song?

They'd all be done!

Right! Melodies certainly are copyrightable, but chord changes aren't. They're functional, and maybe you can get a patent on the twelve-bar blues, but you certainly can't get a copyright! I'm sure some obscure judge somewhere who's never heard a piece of music would be willing to decide to copyright chord changes, and some smart lawyer like Lotus's would be able to convince the judge that was the case.

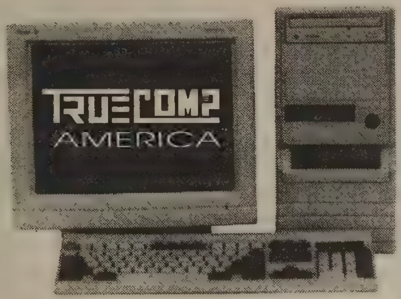
That's really what happened. It's obvious when you talk about chord changes and melodies, but when it comes to talking about software it's pretty sophisticated.

What was really hard on me was the constant criticism I got for pursuing the position of principle. Lotus used this to basically undermine the company greatly, convincing Wall Street that we were going to have to spend $300 million paying them, we'd go out of business, and the Wall Street analysts believing that, and annoucing that we were going to go bankrupt.

That was really hard, because you're torn between two things—one way which is "Oh jeez, we should really settle this thing and let it happen"; the other says, "You can't *do* that!" There was so much criticism that it didn't

YOU CAN'T ARGUE WITH TRUE VALUE!

COMPLETE SYSTEM PACKAGES



486 Ultra VLB System

TRUE CHOICE!

486DX2-66MHz
$ 869
486DX2-80MHz
$ 889
486DX4-100MHz
$ 959

- ✪ 486 VLB Motherboard
- ✪ Pentium Overdrive Ready
- ✪ 256k Fast Cache Memory
- ✪ 4Mb RAM Expandable to 32Mb
- ✪ 1.44 Meg 3-1/2" Floppy Drive
- ✪ 420MB IDE Cache Hard Drive
- ✪ 2 Serial, 1 Parallel, 1 Game Ports
- ✪ 32-bit VLB Super IDE Controller
- ✪ SVGA Windows Accel. VLB 1Mb
- ✪ 14" SVGA .28 NI Monitor
- ✪ 101 Enhanced Keyboard
- ✪ Mini Tower Case w/ 230 Watts
- ✪ Microsoft Compatible Serial Mouse

Super Pentium PCI System

TRUE CHOICE!

Pentium 75MHz
$ 1379
Pentium 90MHz
$ 1599
Pentium 100MHz
$ 1789

- ✪ Pentium PCI Motherboard
- ✪ 256k Fast Cache Memory
- ✪ 8Mb RAM Expandable to 128Mb
- ✪ 1.44 Meg 3-1/2" Floppy Drive
- ✪ 540MB IDE Cache Hard Drive
- ✪ 2 Serial, 1 Parallel Ports
- ✪ Super PCI IDE Controller
- ✪ Orchid Kelvin 64-bit PCI w/ 1Mb
- ✪ 14" SVGA .28 NI Monitor
- ✪ 101 Enhanced Keyboard
- ✪ Mini Tower Case w/ 230 Watts
- ✪ Microsoft Compatible Serial Mouse

TRUECOMP
OF SACRAMENTO

For more information,
call (916) 481-8900
or fax us at (916) 481-6138

PARTS & ACCESSORIES

MOTHERBOARDS W/O CPU

Biotech VLB 486 w/ 256Kb (30 & 72-pin) ZIF	$89
Biotech PCI & VLB 486 w/ 256Kb (30 & 72-pin)	$118
VIA PCI & VLB 486 w/ 256Kb (30 & 72-PIN)	$108
ACER VLB 486 w/ 256Kb (AMI BIOS, 5V)	$95
ACER VLB 486 w/ 256Kb (AMI BIOS, 5V & 3V)	$118
VLB 486 w/ 256Kb (30 & 72-pin, 5V)	$108
VLB 486 w/ 256Kb (72-pin, 5V & 3V)	$118
A.I.R. SH-2 256Kb VLB 486	$118
A.I.R. 54CEP 256Kb EISA & PCI P5-90MHz	$628
A.I.R. 54CDP 256Kb EISA & PCI P5-90MHz (Dual P5)	$728
A.I.R. MIS w/ 256k cache	$165
IBM VLB 486SLC2-66MHz w/ 64Kb + CPU	$128
IBM Blue Lightning 486 75MHz w/ 256k	$219
INTEL P5-90MHz w/ 256Kb	$Call
ASUS P5-75/90/100MHz w/ 512Kb (SIS Chipset)	$288
ASUS P5-75/90/100MHz w/ 256Kb (Triton Chipset)	$308
ASUS P5-75/90/100MHz w/ 256Kb (Dual Processor)	$398

CPU'S

AMD 486DX-40MHz (5V)	$118
AMD 486DX2-66MHz (3V)	$138
AMD 486DX2-66MHz (5V)	$158
AMD 486DX2-80MHz (3V)	$148
AMD 486DX4-100MHz (3V)	$199
Intel 486SX-33MHz	$98
Intel 486DX-33MHz	$118
Intel 486DX2-66MHz	$169
Intel 486DX4-100MHz	$278
Intel P5-75MHz (3V)	$328
Intel P5-90MHz New Version (3V)	$565
Intel P5-100Mhz (3V)	$689

MEMORY

1 x 9 - 70ns (3 chips or 9 chips)	$38.95 / $41.95
4 x 9 - 70ns (3 chips)	$118.95
4 x 9 - 70ns (9 chips)	$139.95
1 x 32 - 70ns (72-pin) 4Mb	$135.95
1 x 36 - 70ns (72-pin) 4Mb	$149.95
2 x 32 - 70ns (72-pin) 8Mb	$2289.95
2 x 36 - 70ns (72-pin) 8Mb	$319.95
4 x 32 - 70ns (72-pin) 16Mb	$435.95
4 x 36 - 70ns (72-pin) 16Mb	$495.95
4 x 36 - 60ns (72-pin) 16Mb	$525.95
8 x 36 - 60ns (72-pin) 32Mb	$995.95

MONITORS

14" (1024 x 768) .28 Non-interlaced	$208
15" (1280 x 1024) .28 Non-interlaced	$288
14" ACER 34T (1024 x 768) .28 NI	$228
15" ACER 56L (1024 x 768) .28 NI 76Hz Refresh	$338
17" ACER 76I (1280 x 1024) .28 NI	$618
15" ViewSonic 15G	$CALL
17" ViewSonic 17G	$698
20" ViewSonic 20G	$Call
21" ViewSonic 21	$Call
17" ADI 5A (1280 x 1024) .26 NI (Low Radiation)	$668
15" SONY 15SF (1280 x 1024) .25 Non-Interlaced	$418
17" SONY GDM - 17SF	$838
17" SONY GDM - 17SE1	$998
20" GDM - 20SE1	$1,798
17" Nanao F550iw (1280 x 1024) .28 NI	$898
Other	$Call

VIDEO CARDS - ISA

Super VGA w/ 512Kb	$34
Windows Accelerator w/ 1Mb (CL-5422)	$58
Windows Accelerator VLB w/ 1Mb (Trident-9400)	$68
Windows Accelerator PCI w/ 1Mb (Trident-9440)	$78
Windows Accelerator PCI w/ 1Mb (S3-864)	$95
Windows Accelerator PCI w/ 2Mb (S3-864)	$135
Windows Accelerator VLB w/ 1Mb (ET-32i)	$85
Windows Accelerator VLB w/ 2Mb (ET-32i)	$125

VIDEO CARDS - VLB / PCI

SpeedStar Pro VLB w/ 1Mb (CL-5428)	$95
Stealth 32 PCI w/ 1Mb (Tseng W32P)	$118
Stealth 64 VLB / PCI w/ 1Mb (S3-764)	$128
Stealth 64 VLB / PCI w/ 2Mb (S3-764)	$168
Stealth 64 VLB / PCI w/ 2Mb (S3-964)	$278
Stealth 64 VLB / PCI w/ 4Mb (S3-964)	$388
Stealth 64 VLB / PCI w/ 2Mb (S3-964) Retail	$318
Stealth 64 VLB / PCI w/ 4Mb (S3-964)	$448
ORCHID Kevin EZ VLB w/ 1Mb	$88
ORCHID Celsius VLB w/ 1Mb (AGX015) VRAM	$95
ORCHID Celsius VLB w/ 2Mb (AGX015) VRAM	$168
ORCHID Kelvin 64 VLB or PCI w/ 1Mb	$128
ATI Graphic Ultra Pro VLB w/ 2Mb Vram	$148
ATI Graphic Win Turbo VLB / PCI w/ 2Mb Vram	$268
ATI Graphic Win Turbo PCI w/ 4Mb Vram	$478
ATI Graphic XPression PCI / VLB 2Mb	$188
#9 9GXE64 VLB or PCI w/ 1Mb (S3-864)	$178
#9 9GXE64 VLB or PCI w/ 2Mb (S3-864)	$228
#9 9GXE64 PRO VLB / PCI w/ 2Mb (S3-964)	$348
#9 9GXE64 PRO VLB / PCI w/ 4Mb (S3-964)	$528

MODEMS

MAXTECH Modem & Fax 14.4 (internal)	$58
MAXTECH Modem & Fax 14.4 w/ Voice (internal)	$68
MAXTECH Modem & Fax 28.8 (Internal)	$108
USR Sporter Modem & Fax 14,4 (Internal)	$98
USR Sporter Modem & Fax 14.4 (External)	$118
USR Sporter Modem & Fax 28.8 V.34 (Internal)	$228
USR Sporter Modem & Fax 28.8 V.34 (External)	$248

HARD DISKS

WD 540Mb EIDE 12ms (WD-2540)	$228
WD 730Mb EIDE 10ms (WD-2700)	$268
WD 850Mb EIDE 10ms (WD-2850)	$288
WD 1.083Mb EIDE 10ms (WD-31000)	$418
WD 1.281Mb EIDE 10ms (WD-31200)	$448
MAXTOR 540MB IDE 12ms (MXT-7540AV)	$189
MAXTOR 540MB IDE 12ms (MXT-7546A	$238
MAXTOR 1.2GB SCSI-2 8.5ms (MXT-1240S)	$548
CONNER 420MB IDE 12ms (CFS420A)	$168
CONNER 540MB EIDE 12ms (CFA540A)	$198
CONNER 850MB EIDE 12ms (CFA850A)	$268
CONNER 1.2GB EIDE 12ms (CFA1275A)	$398
CONNER 1.0GB SCSI-2 10ms (CFP-1060s)	$498
FUJITSU 540MB SCSI-II 12ms	$225
QUANTUM 540MB IDE 12ms	$198

CD-ROM DRIVE

Panasonic 2X (CR-562)	$113
Acer 2X (IDE)	$113
Sony 55E 2X (IDE)	$113
Mitsumi 2X 250ms (IDE)	$113
Mitsumi 4X (IDE)	$179
Teac 55A 4X	$169
Toshiba 3601B 4X SCSI-2	$319

INTERFACE CARDS

IDE VLB 2HD, 2FD, 2s, 1p, 1g	$15
AT I/O 2s (16,540 UARTS), 1p, 1g	$13
Tyan 1346 IDE VLB 4HD, 2FD, 2s, 1p, 1g (16,550)	$28
Tyan 1342 IDE VLB 4HD, 4FD, 2s, 1p, 1g (16,550)	$38
Tyan 1362 IDE PCI 2HD, 2FD, 2s, 1p, 1g	$38
2278D IDE VLB 4HD & 2FD 2s, 1p, 1g	$23.95
1542CF w/o Kit (OEM)	$175
1542CF w/ Kit	$248
2940 PCI SCSI-2 w/ kit (OEM)	$198
2940 PCI SCSI-2 w/ kit	$268
2940W PCI Fast SCSI w/ kit (OEM)	$238
2940W PCI Fast SCSI w/ kit	$328
2842 VL Fast SCSI-II VESA (OEM)	$198
2842 VL Fast SCSI-II VESA w/ Kit	$228
2742T EISA SCSI-II w/ Kit	$229

FLOPPY DRIVES

1.44Mb / 1.2Mb (Mitsumi)	$28 / $38
1.44Mb (TEAC)	$33
1.2Mb (TEAC)	$42
1.44Mb (TEAC) Black	$38
1.2Mb (TEAC) Black	$48
1.2MB & 1.44MB Combo (Teac)	$88
1.2MB & 1.44MB Combo (Mitsumi)	$79

MICE

3-Buttons Serial	$6.95
2 Buttons Serial	$14.95
Dexxa Serial	$14.95
Logitech MouseMan Combo Serial	$29.95
Logitech TrackMan Combo Serial	$74.95
Logitech TrackMan Voyager Serial	$64.95
Microsoft Serial Mouse (Ergonomic)	$24.95
Microsoft PS-2 Mouse (Ergonomic)	$45.95
Microsoft Bus Mouse (Ergonomic)	$59.95

ACCESSORIES

Colorado 250Mb Tape Back-up (Retail Box)	$149.95
Colorado 350Mb Tape Back-up (Retail Box)	$169.95
Toner HP-92274A	$68
Toner HP-92298A (4-plus)	$118
Toner HP-C43900A (4-V)	$158
HP-51640 Series (Magenta, Cyan, Yellow, Black)	$24.95
CPU Cooling kit w/ heatsink & fan	$4.98
CPU Cooling Kit w/ heatsink & fan (All Pentium)	$7.98
MS-DOS 6.22 (OEM) w/ system only	$45
Windows 3.11 (OEM) w/ system only	$55
Windows 3.11 for work group w/ system only	$55
Sound Blaster 16 Basic Value Edition	$93
Sound Blaster 16 MCD	$99
Sound Blaster 16 SCSI-II (OEM)	$118
Sound Blaster 16 SCSI-II w/ ASP	$193
Sound Blaster AWE 32 Value Edition	$228
Sound Blaster AWE 32	$268
Discovery 16 CD (Retail Package)	$248
Logitech SoundMan Wave	$89

TRUECOMP
AMERICA
1264 So. Bascom Ave., San Jose, CA 95128

MasterCard
VISA

(408) 292-8889
Fax: (408) 292-6199

SAVE 3%
ON CASH PURCHASES

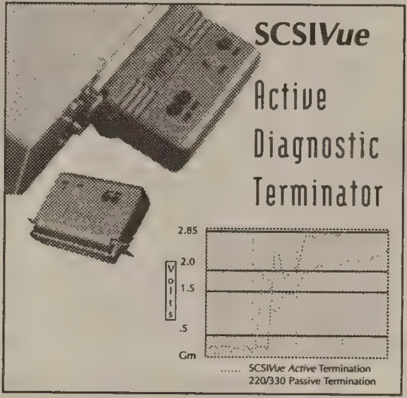
OPEN: Mon-Fri 9:30 to 6:00
Sat 10:00 to 5:00

Price, term, availability subject to change without notice. Not responsible for typos. Cash discount applies to currency only (not checks and credit cards). Please call for more information.

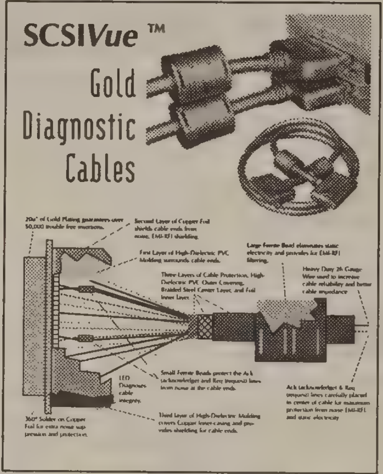
We Fix SCSI Problems And Improve SCSI Performance

The quality of your SCSI Cables and Terminators has a direct effect on the performance and reliability of any SCSI bus. Using inexpensive "PASSIVE TYPE" Terminators and "UN-SHIELDED" Cables can cause many problems. Granite Digital has introduced the SCSIVue line of *Active Diagnostic Terminators* and *Gold Diagnostic Cables* to eliminate SCSI problems and to improve SCSI performance.

- Active Termination Increases Reliability
- Reduces SCSI Retries - Runs Faster
- Eliminates Crashes
- Matches Cable Impedance Needs
- Gold Connectors Reduce Noise
- LEDs Diagnose SCSI Problems



SCSIVue Active Diagnostic Terminator
2.85
2.0
1.5
.5
Gm
Volts
SCSIVue Active Termination
220/330 Passive Termination



- Heavy Duty (military type) Cable Construction
- Provides Best Impedance Match
- Foil, Braid, Ferrite Shielding Reduces Noise
- Data Transfers Are Dramatically Improved
- LED Provides Diagnostic Ability
- Reduces SCSI Retries and SCSI Errors

SCSI*Vue* Terminator

Centronics 50....... $59
✓ Active regulation
✓ Gold Contacts
✓ Diagnostic LED's
✓ Heavy Shielding

MicroD 50............ $79
✓ Active regulation
✓ Gold Contacts
✓ Diagnostic LED's
✓ Heavy Shielding

MicroD 68............ $99
✓ Active regulation
✓ Gold Contacts
✓ Diagnostic LED's
✓ Heavy Shielding

MicroD 68 Diff....... $99
✓ Active regulation
✓ Gold Contacts
✓ Diagnostic LED's
✓ Heavy Shielding

50c-Active
50md-Active
68md-Active
68md-Diff

SCSI*Vue* Gold Cables

25 Apple - 50 Centronics
2'..........$49
6'..........$59

25a-50c

50 Cent - 50 Cent
8"..........$49
18"..........$59
3'..........$69
6'..........$79
15'..........$119

50c-50c

50 Centronics - 50 MicroD
3'..........$99
6'..........$119
15'..........$179

50c-50md

50 MicroD - 50 MicroD
8"..........$79
18"..........$89
3'..........$99
6'..........$119
15'..........$179

50md-50md

68 MicroD - 68 MicroD
8"..........$129
18"..........$139
3'..........$149
6'..........$169
15'..........$229

68md-68md

SCSI 2+3 COMPATIBLE

Granite

Quantity & Dealer Discounts

Phone 510-471-6442 D•I•G•I•T•A•L Fax 510-471-6267
Granite Digital • 3101 Whipple Road • Union City, Ca. 94587

Available At The Following Bay Area Dealers:

Advanced Computer Systems 681 Grape Ave. Sunnyvale 408-732-6200
CBE Systems 210 Columbus St. San Francisco 415-956-8484
Computer Center of Hayward 23951 Mission Blvd Hayward 510-538-7368
Compudata 22 Third St San Francisco 415-495-3422
Computer Source of Hayward 1216 W Winton Ave Hayward 510-784-1136
FRY'S Electronics 600 E. Hamilton Ave Cambell 408-364-3700
FRY'S Electronics 440 Mission Ct. Fremont 510-770-3797
FRY'S Electronics 340 Portage Ave Palo Alto 415-496-6000
FRY'S Electronics 1177 Kern Ave Sunnyvale 408-733-1770
Hitron Systems 3170 El Camino Real Santa Clara 408-261-2695
Home & Business Com Ctr 1807-H Santa Rita Rd Pleasanton 510-846-3944
International Datawares 2278 Trade Zone Blvd. San Jose 408-262-6660
McTek Systems 1521 San Pablo Ave Berkeley 510-525-5129
NCA Computer Products 40521 Albrea St Fremont 510-249-0850
NCA Computer Products 3825 El Camino Real Palo Alto 415-493-2444
NCA Computer Products 962 Blossom Hill Rd San Jose 408-363-4600
NCA Computer Products 1202 Kifer Rd Sunnyvale 408-739-9010
PARS International Computer 22441 Foothill Blvd Hayward 510-733-0103
SCSI Works Computer Products 6225 Jarvis Ave Newark 510-494-8100
Whole Earth Electronics 834 Anthony St Berkeley 510-845-3000
Whole Earth Electronics 1975 Diamond Blvd Bldg 4 Concord 510-686-2270
Whole Earth Electronics 901 E Francisco Blvd San Rafael 415-459-3533

make sense any more for me to continue in that position, and it was hard.

A lot of people say Borland's shrunk. Well, other companies have shrunk more than Borland, like Software Publishing. Actually, Borland is a leader in tools today. But that was hard.

What was the complaint about the CDs? You were paying for them with your own money, after all, not the company's. Where did the shareholders get off thinking they had anything to gripe about?

Well, what happened was that people assumed that while I was doing that I wasn't managing the company, it was a bad thing to do, and blah-blah-blah. "No value in doing this." That started fundamentally with criticism in different publications, coming from different shareholders.

It was the image.

You were fiddling while Rome burned?

Right. "You should not be doing music, you should be managing the company."

What people didn't realize was that part of what our customers liked at Borland was that personal relationship, and the fact that there was more than just software.

As a matter of fact we should have called them multimedia CD-ROMs, and nobody would have said anything about it! [*laughter*]

It was part of silly criticism, and I think when it rains it pours. I think the main issue was the Lotus litigation. I think Wall Streeet and a lot of the business commentators assumed that we were the bad guys, Lotus was right, we copied. It was in many publications—we were the bad guys and we copied the order in which the words appeared in the menus, and therefore we probably were bad guys.

Just like if we had written another twelve-bar blues, you know?

So according to the decision of the appeals court, if Paperback Software [a Berkeley company founded by Adam Osborne that folded in the wake of a judgment that its VP-Planner spreadsheet infringed on Lotus copyrights in the same manner Quattro was alleged to do] had managed to last this long, would they be okay too?

Oh, it's absolutely clear that Lotus put Paperback under in a totally unfair way. I'm glad you're bringing that up. It's clear that Adam Osborne was right, that Lotus destroyed a software company once, and tried to destroy Borland in exactly the same way.

If you took the ruling of the appeals court and applied it to Paperback, they would have been fine.

So is Lotus going to appeal the decision to the Supreme Court?

They have, they announced it last Thursday. They are appealing it to the Supreme Court. It doesn't go further than that.

We really hoped that that was behind us and that Lotus would stop spending money on lawyers.

But the Supreme Court may just decide "Forget it, we're not even going to look at this."

They just did that with Microsoft and Apple.

I think Lotus is wrong, that the Court of Appeals with three judges totally unanimously agreed on that, there's no question. Chord changes are not copyrightable! [*laughs*]

I think it'll be rejected and they'll lose again. Fundamentally I don't understand Lotus; they've spent tens of millions of dollars already in legal fees, and so they want to continue this. And they will lose. They will lose bigtime on this one.

7 DAY MONEY-BACK
UNCONDITIONAL
GUARANTEE

7 Day Money-Back Guarantee on Systems!

Lifetime Labor Warranty on Complete Systems
All systems go through a 72 hour burn-in test

ALL PENTIUM SYSTEMS USE 100% INTEL™ MOTHERBOARDS
ZAPPA, PLATO, HENDRIX

ICS P5-100

- ⇒ Intel **Zappa** PCI Motherboard
- ⇒ Intel Pentium 100 CPU
- ⇒ 256K Cache - optional 512K cache
- ⇒ **16MB** RAM - 72PIN 70ns SIMMS
- ⇒ Fujitsu 1GB **Fast/Wide** SCSI II
- ⇒ Adaptec 2940**Wide** SCSI II PCI
- ⇒ ATI WinTurbo **64** w/**4MB VRAM**
- ⇒ ExView 17" Monitor **.26 dpi**
  1600x1280 @60hz NI Digital Control
- ⇒ TEAC 1.44 3.5" Floppy Drive
- ⇒ Medium Tower Case
- ⇒ Focus 2001 Keyboard
- ⇒ Microsoft Mouse
- ⇒ 2 PCI IDE, 2 FDD, 2 16550 I/O, 1 EPP

$3899

ICS P5-90

- ⇒ Intel **Plato** PCI Motherboard
- ⇒ Intel Pentium 90 CPU
- ⇒ 256K Cache - optional 512K cache
- ⇒ **16MB** RAM - 72PIN 70ns SIMMS
- ⇒ Conner/Quantum 540MB IDE HD
- ⇒ ATI Graphics WinTurbo **64**
  w/**2MB VRAM** call for 4MB option
- ⇒ ExView 15" Monitor **.28dpi**
  1280x1024 @60hz NI Digital Control
- ⇒ TEAC 1.44 3.5" Floppy Drive
- ⇒ Medium Tower Case
- ⇒ Focus 2001 Keyboard
- ⇒ Microsoft Mouse
- ⇒ 2 PCI IDE, 2 FDD, 2 16550 I/O, 1 EPP

$2699

ICS P5-75

- ⇒ Intel **Plato** PCI Motherboard
- ⇒ Intel Pentium 75 CPU
- ⇒ 256K Cache - optional 512K cache
- ⇒ **16MB** RAM - 72PIN 70ns SIMMS
- ⇒ Conner/Quantum 540MB IDE HD
- ⇒ ATI Graphics WinTurbo **64**
  w/**2MB VRAM** call for 4MB option
- ⇒ ExView 15" Monitor .28dpi
  1280x1024 @60hz NI Digital Control
- ⇒ TEAC 1.44 3.5" Floppy Drive
- ⇒ Medium Tower Case
- ⇒ Focus 2001 Keyboard
- ⇒ Microsoft Mouse
- ⇒ 2 PCI IDE, 2 FDD, 2 16550 I/O, 1 EPP

$2499

ICS P5-60

- ⇒ Intel **Hendrix** PCI Motherboard
- ⇒ Intel Pentium 60 CPU
- ⇒ 256K Cache - optional 512K cache
- ⇒ **8MB** RAM - 72PIN 70ns SIMMS
- ⇒ Conner/Quantum 540MB IDE HD
- ⇒ **64Bit Accelerator w/2MB DRAM**
  Cirrus Logic 5434 onboard PCI
- ⇒ ExView 14" Monitor .28dpi
  1024X768 @60hz NI Digital Control
- ⇒ TEAC 1.44 3.5" Floppy Drive
- ⇒ Medium Tower Case
- ⇒ Focus 2001 Keyboard
- ⇒ Microsoft Mouse
- ⇒ 2 PCI IDE, 2 FDD, 2 16550 I/O, 1 EPP

$1699

ICS 486 I

- ⇒ 486 PCI Motherboard
- ⇒ **Intel DX4/100**
- ⇒ 256K Cache - optional 512K cache
- ⇒ **16MB** RAM - 72PIN 70ns SIMMS
- ⇒ Conner/Quantum 540MB IDE HD
- ⇒ ATI WinTurbo 64 w/**2MB VRAM**
- ⇒ ExView 15" SVGA Monitor **.28 dpi**
  1280x1024 @60hz NI Digital Control
- ⇒ TEAC 1.44 3.5" Floppy Drive
- ⇒ Medium Tower Case
- ⇒ Focus 2001 Keyboard
- ⇒ Microsoft Mouse
- ⇒ 2 IDE, 2 FDD, 2 16550 I/O, 1 EPP

$1999

ICS 486 II

- ⇒ 486 PCI/VLB Motherboard
- ⇒ AMD DX2/80 (call for DX4)
- ⇒ 256K Cache - optional 512K cache
- ⇒ **8MB** RAM - 72PIN 70ns SIMMS
- ⇒ Conner/Quantum 540MB IDE HD
- ⇒ ATI MACH **32** w/**2MB DRAM**
- ⇒ ExView **15"** SVGA Monitor **.28 dpi**
  1280x1024 @60hz NI Digital Control
- ⇒ TEAC 1.44 3.5" Floppy Drive
- ⇒ Mini Tower Case
- ⇒ Focus 2001 Keyboard
- ⇒ Microsoft Mouse
- ⇒ 2 IDE, 2 FDD, 2 I/O, 1 Parallel

$1569

ICS 486 III

- ⇒ 486 VLB Motherboard
- ⇒ Intel DX2/66 (call for DX2/80 & DX4)
- ⇒ 256K Cache - optional 512K cache
- ⇒ **8MB** RAM - 72PIN 70ns SIMMS
- ⇒ Conner/Quantum 420MB IDE HD
- ⇒ Local Bus S3 805 w/1MB DRAM
- ⇒ ExView 14" SVGA Monitor **.28 dpi**
  1024x768 @60hz NI Digital Control
- ⇒ TEAC 1.44 3.5" Floppy Drive
- ⇒ Mini Tower Case
- ⇒ Focus 2001 Keyboard
- ⇒ Microsoft Mouse
- ⇒ 1 IDE, 2 FDD, 2 I/O, 1 Parallel

$1369

ICS 486 IV

- ⇒ 486 VLB Motherboard
- ⇒ Intel 486 SX 33 (Upgradeable!)
- ⇒ 256K Cache
- ⇒ **4MB** RAM - 72PIN 70ns SIMMS
- ⇒ Conner/Quantum 420MB IDE HD
- ⇒ Local Bus S3 805 w/1MB DRAM
- ⇒ ExView 14" SVGA Monitor **.28 dpi**
  1024x768 @60hz NI Digital Control
- ⇒ TEAC 1.44 3.5" Floppy Drive
- ⇒ Mini Tower Case
- ⇒ Focus 2001 Keyboard
- ⇒ Microsoft Mouse
- ⇒ 1 IDE, 2 FDD, 2 I/O, 1 Parallel

$999

PENTIUM SERVER

- ⇒ Intel Plato PCI Motherboard
- ⇒ Intel Pentium 90 CPU
- ⇒ 256K Cache - optional 512K cache
- ⇒ **16MB** RAM - 72PIN 70ns SIMMS
- ⇒ Fujitsu 1GB **Fast/Wide** SCSI II
- ⇒ Adaptec 2940**Wide** SCSI II PCI
- ⇒ TEAC 1.44 3.5" Floppy Drive
- ⇒ Medium Tower Case
- ⇒ Focus 2001 Keyboard
- ⇒ Microsoft Mouse
- ⇒ 2 PCI IDE, 2 FDD, 2 16550 I/O, 1 EPP

DUAL PENTIUMS AND NAME BRAND SERVERS ALSO AVAILABLE

$2699

NETWORKING

COMPEX Ethernet RJ45	$54.95
COMPEX Ethernet BNC	$54.95
COMPEX Ethernet Combo	$64.95
3COM Etherlink III RJ45	$110.95
3COM Etherlink III Combo	$115.95
3COM Etherlink III EISA	$226.95
INTEL EtherExpress 16Combo	$109.95
INTEL EtherExpress 32EISA	$460.95
INTEL EExpress PRO RJ45	$119.95
INTEL EExpress PRO FLASH	$139.95
INTEL EExpress PRO 100	$329.95
HUBS	FROM $109.95
TRANSCEIVERS	$39.95
RJ45/BNC CONNECTORS	$1.25
MADE TO ORDER CABLES	$CALL
NETWORKING SOFTWARE	$CALL

DISPLAY CARDS

ATI WinTurbo 64 4MB VRAM	$469.95
ATI WinTurbo 64 2MB VRAM	$269.95
ATI MACH32 2MB VRAM	$229.95
ATI MACH32 2MB DRAM	$159.95
DIAMOND STLTH 64 4VRAM	$429.95
DIAMOND STLTH 64 2VRAM	$269.95
VRAM/DRAM UPGRADES	$CALL
VESA LB S3 805	$75.95

MODEMS

USR COURIER V. 34 EXT	$469.95
USR SPORTSTER V.34 EXT	$419.95
USR SPORTSTER V.34 INT	$239.95
USR SPORTSTER 14.4 INT	$129.95
28.8 V.34 FAX/MODEM INT	$135.95
14.4 VOICE/FAX/MODEM	$59.95

CONTROLLER CARDS

ADAPTEC 3940W PCI	$499.95
ADAPTEC 3940 PCI	$459.95
ADAPTEC 2940W PCI	$279.95
ADAPTEC 2940 PCI	$259.95
ADAPTEC 2842 VLB	$249.95
ADAPTEC 1542CF ISA	$229.95

MULTI-MEDIA

SOUNDBLASTER AWE32	$259.95
SOUNDBLASTER 16 MCD	$89.95
MITSUMI 2X IDE CDROM	$129.95
MITSUMI 4X IDE CDROM	$199.95
NEC 3Xi SCSI2 CDROM	$299.95
TOSHIBA 4X SCSI2 CDROM	$299.95
PLEXTOR 4X SCSI2 DROM	$479.95
OTHER BRANDS/SPEEDS	$CALL

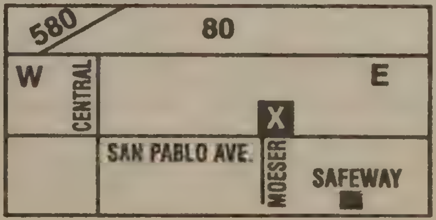
Other Services Offered:
Consulting, Network Installation, Servicing and Maintenance
UNIX (SCO, SUN, UnixWare, Linux) System Installation and Administration

3Com
SCO THE SANTA CRUZ OPERATION
HEWLETT PACKARD

InnoCom Systems, Inc.

10585 San Pablo Avenue, El Cerrito, CA 94530
Phone: 510-528-1171 **Fax:** 510-528-1174
BBS: 510-528-1173 **EMail:** info@innocom.com
Business Hours: Mon-Fri 10am-7pm Sat-Sun 11am-4pm

Prices subject to change without notice. Not resposible for typographical errors. PRICES ARE BASED ON CASH PAYMENTS.



1 800 528 1173

It's wrong. It's yet more money spent on litigation rather than innovation. If I was a user of Louts products, whether it's Notes or SmartSuite or 1-2-3, I'd be very worried, because what they're telling users is that they believe that Notes APIs, Lotus 1-2-3 macros, are totally proprietary, meaning that if tomorrow Lotus stops evolving the product, you're stuck, because they'd sue anybody who'd build a compatible product, even without taking any copyrighted stuff.

It's even worse, if you think about it. If Lotus was right, Microsoft could close the industry forever. Because if anybody has some functional APIs to protect, it's Microsoft. It is amazing that Lotus can't see that—if Microsoft was using the same arguments that they're trying to have pushed in their decision, they would never be able to write a Windows app ever! It makes no sense! It shows that they have no clue what they're doing!

At the press conference when you guys acquired Paradox, you got up and said, "Of course this doesn't mean we're turning into a bunch of corporate assholes."

And you didn't. But you sure did get big, and you sure did have to deal with a lot of corporate bogosity you didn't have to deal with before. How do you propose to avert these problems from Starfish?

Well, I think we'll have the same philosophies, but there's things we can't avert. Like if we get sued by someone for some reason, well, we'll have to defend ourselves. If there's positions of principle we need to take, we'll take them; there's not much we can do.

Do we want to be big? That's not important to us. What's important to us is to make our vision of building personal communicators happen, to build solutions for customers. The consequence for this is to grow, and that's great. But growth for the sake of growth is not the goal of the company; the goal of the company is to provide the best software and the best service to customers, and as a consequence to grow.

Of course a lot of people here are excited—they're part owners of the company. That's exciting because it's a great opportunity—how many startups are there that actually reach the stage of passing $5 million in real sales? A lot of them never make it.

Growth has its attractiveness and has its challenges, and I think we're trying to take everything we've learned from the Borland experience and try to apply it here.

To give you an example—you asked about the Ashton-Tate acquisition. One of the mistakes we made when we acquired Ashton-Tate was that we did not hire a new team in charge of integrating both companies. I certainly had no experience, and certainly none of the people on the team had any experience.

And there was a lot of cultural difference.

Absolutely. And none of the people on our team had any experience. So we kind of laid off everybody.

We did not do this right. That's part of the execution side that could have been better, and if we ever do something like that at Starfish, we certainly would know better. It's bringing outside talent, not just having ingrown talent, and attracting the best people.

Today Starfish is trying to attract the best creative software engineering types and architects in the Bay Area and other places. But what's very important here, unlike Borland where we were looking for very specific things, the kind of guys who like to build optimizing compilers, very special kinds of people—in the case of Starfish we're looking for people who have that vision of building small, focused software. We're not looking for people who want to be part of a team of fifty people building the same product, but people who want to be part of a team of three or four or five people.

Will you get involved in each of the products as they get developed?

I'm fairly involved in the products; that's part of what I do best, the architecture and the strategy. But you don't need to micromanage it. You can be involved in that at the inception of the product, or through weekly or biweekly reviews. You don't need to be there every day.

My role is to be the producer of the albums. I don't want to write the songs. I'm certainly going to make sure that they're polished; I might say, "Hey, how about this kind of song? We need this kind of song on this thing."

We only exist if we are successful with key products. The vision here is not to produce two hundred titles and to have five successful. The vision here is to produce very few titles but have them successful. It's focused on having very few and really crafting them.

Because our vision is that there's an opportunity to get into this careful crafting of each product. That does not mean micromanaging; that means working with the teams and empowering the teams, but still having a feedback loop with regular reviews.

Which is one of the things that happened very positively at Borland, it's still happening that way. Borland got criticized for a lot of things, but never for the quality of its products. That kind of process worked well.

How much time do you now devote to music?

The answer is usually "not enough." I try to play an hour a day or more. I don't play much with others, but I play a lot with records. In the last year I've been kind of secluded, but I get to play with a lot of good players on CDs! It's just so convenient, turn the CD on, it's three in the morning....

I've got a music studio in my home. I bought Leon Patillo's house, Carlos Santana's singer, and he had built a studio in the back. That's been great, because you can play at four in the morning and make as much noise as you want. So now it's a combination music studio and software development studio. It gives me an opportunity to play a lot at weird times—how can you get some musicians in and say, "Hey, let's play together! And by the way, it's going to be at three in the morning!" [*laughter*] "What? I got a life, you know!"

It's not enough music, and that goes with the territory.

One thing I don't do is play with computers and music.

You want *real* reeds.

Exactly. I spend so much time with computers that I just want to play. I want to blow on a horn. Blow on a flute.

Maybe if you do keyboards you want to program it more. But I have this resistance to MIDI stuff. I have Jammer Pro and all this stuff, but it's so boring! Here I am programming again! I just want to *play*!

I'm much more interested in that aspect of things. ■

WELCOME TO

San Francisco Marketplace

San Francisco Marketplace is a new advertising section devoted to system resellers in San Francisco. To ensure that this resource is always available, *MicroTimes* is guaranteed to be found at selected locations throughout San Francisco (see below).

If you don't see what you're looking for in San Francisco Marketplace, browse *MicroTimes* cover to cover for other San Francisco advertisers in *Business Solutions, The Online Guide, MultiMedia & Beyond*, and other editorial sections.

For your convenience, advertisers who aren't in San Francisco Marketplace* are listed below (see our advertiser index for page numbers):

- **Beta Nineties Computer, Inc.**
- **California Computer Company**
- **California LS**
- **Center for Electronic Arts**
- **Clarity TeKnowlogy**
- **CPU & Memory Exchange Club**
- **CRL**
- **Domino**
- **Evernet Education Services**
- **HD Computers**
- **Internet Literacy Consultants**
- **ITS CD**
- **LanTrek Networks Inc.**
- **NOW Electronics**
- **Laptop Superstore**

If you offer computer products or services in San Francisco and would like your advertisement in San Francisco Marketplace, call the *MicroTimes* sales office at **(510) 934-3700.**

*Although we do our best to maintain accuracy, the publisher does not assume liability for errors or omissions

---

SF

TO OUR READERS:

Guaranteed to find MicroTimes!

Find *MicroTimes* magazine always at the following locations:

Compudata - 22 Third Street
(Between Market & Mission)
HD Computer - 500 Washington Street
(Cross Street Sansome)
SF Micro -1143 Post Street
(Between Van Ness & Polk)
Konicom -1510 Noriega Street
(Between 22nd & 23rd Ave.)
Software Center plus Hardware - 36 Second Street
(Near Market Street)
Comart - 444 6th Street
(Between Bryant & Harrison)
San Francisco Computer Center - 4300 Geary Street
(Cross Street 7th Ave.)

Now, get your complete guide to information and resources all month long. We're stocking up, so come and get 'em!

Upcoming cover dates:

May 1
May 29
June 26
July 24
August 21

San Francisco Marketplace Your guide to resources in The City

COME VISIT KONICOM COMPUTERS

–IN THE SUNSET–

FOR ALL OF YOUR COMPUTER NEEDS

WE SERVICE OUR NEIGHBORHOOD AND THE SURROUNDING COMMUNITY.

Multimedia Special Packed with value!

K486c DX2-66

Only $1098

- DX2-66MHz CPU
- Mini Tower Case w/230W Power Supply
- 4MB RAM Memory
- 128K Cache Memory
- 3 VLB, 4 ISA 16 Bit Slots
- VESA Local Bus IDE Controller
- Cirrus Logic 5429 Windows Accelerator Video
- 1.44MB Teac/Mitsumi Floppy Drive
- 2 Serial,1 Parallel, 1 Game Port
- 14" GVC Monitor NI .28 dot- Low Emission
- 5400MB IDE Hard Drive-12ms
- Internal 14.4/14.4 Fax/Data Modem
- 101 Enhanced Keyboard
- Microsoft Compatible Mouse
- Double Spees CD ROM (250ms/350kb)
- 16 Bit Sound Card
- 80W Speakers
- 10 CD Titles

K486a DX4-100

$1088

- AMD DX4-100MHz CPU
- Medium Tower Case w/230W Power Supply
- OPTI Chipset
- 4MB RAM Memory
- 256K Cache Memory
- 3 VLB, 4 ISA 16 Bit Slots
- VESA Local Bus IDE Controller
- Cirrus Logic 5429 Windows Accelerator Video
- 1.44MB Teac/Mitsumi Floppy Drive
- 2 Serial,1 Parallel, 1 Game Port
- 14" GVC Monitor NI .28 dot- Low Emission
- 1.08 GB IDE Hard Drive-12ms
- Internal 14.4/14.4 Fax/Data Modem
- 101 Enhanced Keyboard
- Microsoft Compatible Mouse

K486a DX2-80

$999

- AMD DX2-80MHz CPU
- Medium Tower Case w/230W Power Supply
- OPTI Chipset
- 4MB RAM Memory
- 128K Cache Memory
- 3 VLB, 4 ISA 16 Bit Slots
- VESA Local Bus IDE Controller
- Cirrus Logic 5429 Windows Accelerator Video
- 1.44MB Teac/Mitsumi Floppy Drive
- 2 Serial, 1 Parallel, 1 Game Port
- 14" GVC Monitor NI .28 dot- Low Emission
- 850MB IDE Hard Drive-12ms
- Internal 14.4/14.4 Fax/Data Modem
- 101 Enhanced Keyboard
- Microsoft Compatible Mouse

KP90i

$1888

- Intel Pentium 90MHz CPU
- Medium Tower Case w/230W Power Supply
- SIS Chipset
- 8MB RAM Memory
- 256K Cache Memory
- 4 PCI, 4 ISA 16 Bit Slots
- PCI Local Bus Enhanced IDE Controller
- PCI Stealth 64 Graphics Accelerator Card
- 1.44MB Teac/Mitsumi Floppy Drive
- 2 Serial (16550 UART), 1 Parallel
- 15" Digital Flat Screen Monitor NI .28 dot
- 1.08 GB IDE Hard Drive-12ms
- Internal 14.4/14.4 Fax/Data Modem
- 101 Enhanced Keyboard
- Microsoft Ergonomic Mouse

KP100i

$2099

- Intel Pentium 100MHz CPU
- Medium Tower Case w/230W Power Supply
- SIS Chipset
- 8MB RAM Memory
- 256K Cache Memory
- 4 PCI, 4 ISA 16 Bit Slots
- PCI Local Bus Enhanced IDE Controller
- PCI Stealth 64 Graphics Accelerator Card
- 1.44MB Teac/Mitsumi Floppy Drive
- 2 Serial (16550 UART), 1 Parallel
- 15" Digital Flat Screen Monitor NI .28 dot
- 1.08 GB IDE Hard Drive-12ms
- Internal 14.4/14.4 Fax/Data Modem
- 101 Enhanced Keyboard
- Microsoft Ergonomic Mouse

The Best and Largest Selection of ADULT TITLES

101 SEX Positions 1	$24.95
101 SEX Positions 2	$24.95
All Beauties	$19.95
Adult Palate	$19.95
A Pussy Called Wanda	$19.95
Adult Movie Almanac	$34.95
American Girls	$19.95
American Blonde	$19.95
American Girls 2	$19.95
Asian Palate	$24.95
Adv. of Seymore Butts	$34.95
Best of VIVID	$24.95
Blonde Justice	$19.95
Blind Spot	$19.95
DOS	$19.95
Busty Babes	$19.95
Centerfolds and Covergirls	$24.95
Curse of the Cat Woman	$19.95
Cheating	$19.95
Cafe Flesh	$24.95
Coven	$19.95
Dream Machine - Interactive	$35.00
Digital Dancing	$44.95
Digital Dreams	$29.95
Dirty Debutantes 1 - Interactive	$24.95
Forever	$19.95
Girls of VIVID	$19.95
Girls of VIVID 2	$19.95
Girls Doin' Girls	$24.95
Girls of J.Stephen Hicks	$19.95
High Volume Nudes	$19.95
Hidden Obsession	$19.95
Hollywood Biker Chicks	$24.95
House of Dreams	$19.95
Hotslots	$29.95
Ice Woman	$29.95
Immortal Desires	$19.95
Insatible	$19.95
International Beauties	$9.95
Intimate Journey	$24.95
Japanese Porn Superstar	$29.95
Kelly Eighteen	$19.95
Kama Sutra	$29.95
Legends of Porn 2	$19.95
Love Bites	$24.95
Mystique of the Orient	$19.95
Mask	$19.95
Men's Club	$9.95*
Mind Teazzer	$24.95
Mind Teazer 2	$24.95
Movies for the Night	$9.95*
Naked Edge	$29.95
Naked Reunion	$29.95
New Wave Hooker	$19.95
New Lovers	$24.95
Night Watch 1 - Interactive	$24.95
Night Watch 2 - Interactive	$24.95
Oriental HOT Nights Vol.1	$9.95*
Oriental HOT Nights Vol.2	$9.95*
Private - Lady In Spain	$24.95
Private Video Magazine	$24.95
Penthouse Interactive Virtual Shoot Volume 1	$49.95
Penthouse Interactive Virtual Shoot Volume 2	$49.95
Penthouse Interactive Virtual Shoot Volume 3	$49.95
Pink Lady	$9.95*
Phone Sex	$9.95
Pretty Babes	$9.95*
Professional beauties	$19.95
Pussy Called Wanda 2	$24.95
Parlor Games	$29.95
Racquel Released	$24.95
Southern Beauties	$24.95
Seedy Rom Movie Disc 1	$29.95
SEX	$19.95
Secrets	$19.95
Steamy Windows	$19.95
SUPERmodels Go Wild	$24.95
Super Smutware	$24.95
Sakura	$9.95
Samurai Pervert	$39.95
Spy Club - Interactive	$39.95
Sorority House - Interactive	$39.95
Swap 2	$24.95
Takin' It Off!	$24.95
Tracy I Love You	$19.95
Traviata, La	$9.95*
Virtual Vixens	$35.00
Virtual VIVID	$9.95
Vision	$29.95
Vampire's Kiss	$39.95
Voices In My Bed	$29.95
Virtual Valerie	$34.95
Winner Take All	$29.95
Women of Beverly Hills	$24.95
X-Rated Bloopers	$24.95

We have thousands of CD titles and too many to list. Please call for a list or come by our store and see for yourself!

KONICOM
COMPUTERS INC.

1510 Noriega Street
San Francisco, CA 94122

VISA MasterCard

Tel: 415-664-3268
Fax: 415-664-0883

HOURS:
M-Th 9:30-7pm
Fri 9:30-8pm
Sat 10-6pm

One year parts and labor warranty. Prices subject to change without notice. Not responsible for typographical errors. All trademarks are properties of their respective companies.

COMPU DATA

BRING HOME COMPUDATA QUALITY TODAY

Call and Order Yours Today.

NOTEBOOK SPECIALS

TOSHIBA 1910CS

- 486SX/33
- Dual Scan
- 4MB RAM
- 200MB Hard Drive

$1777

TOSHIBA 1960CS

- 486DX2/50
- Dual Scan
- 4MB RAM
- 200MB Hard Drive

$1999

TOSHIBA 2450CT

- 486DX4/75
- 8MB RAM
- 500MB Hard Drive
- 9.5" TFT

$4299

TOSHIBA T-4850CT

- Intel 486DX4-75MHz (3.3Volts)
- 8MB RAM Standard
- 1.44 3.5" Floppy Drive
- 500MB Hard Drive
- 10.4" TFT Active Color Screen
- Built in Headphone/Speaker Jack/Microphone Jack
- Wave Audio Compatible Sound card
- DOS/WINDOWS/TRACKBALL

$4499

TOSHIBA T-4850CT

- Intel 486DX4-75 MHz (3.3 Volts)
- 8 MEG RAM Standard
- 1.44 3.5" Floppy Drive
- 500 MEG HD/772 MEG HD
- 10.4" TFT Active Color Screen
- Built-In Headphone/Speaker Jack/ Microphone Jack
- Wave Audio Compatible Sound Card
- DOS/Windows/Trackball

$3899

TOSHIBA T-4900CT PENTIUM

- Intel Pentium 75MHz Processor (3.3 volt)
- 8 MEG RAM Standard
- 1.44 3.5" Floppy Drive
- 810 MEG HD
- 10.4" TFT Active Color Screen
- Wave Audio Compatible Sound Card
- 2 PCMIA Slots
- DOS/Windows for Workgroups/Trackball

$5699

IBM THINKPAD 755 CE DX 4-100 MHZ

- 8 MB RAM
- 810 MB HD
- 10.4" Active
- Speakers/Microphone
- 1.44 MB FD
- DOS/Windows

$5699

IBM THINKPAD 755C DX4-75MHZ

- Active Matrix 10.4"
- 4 MB RAM
- 340 MB HD
- 1.44 MB FD
- 640 x 480 - 1 MB VRAM
- DOS/Windows

$3849

IBM THINKPAD 701 CS DX4-75MHZ

- 8 MB RAM
- 360 MB HD
- SUGIA VLB 1 MB VRAM
- Dual Scan 10.4"
- 14,400 Modem

$4299

IBM THINKPAD 360 CE DX2-50MHZ

- 4 MB RAM
- 340 MB HD
- VLB 1 MB VRAM
- 8.4" Active

$2999

TEXAS INSTRUMENTS 4000 DX4-100MHZ

- 4 MB RAM
- 525 MB HD
- 1 MB VRAM
- 9.5" Active
- Sound Blaster

$3999

TEXAS INSTRUMENTS 5000 PENTIUM 75MHZ

- 8 MB RAM
- 810 MB HD
- 2MB VRAM
- 10.4" Active
- Media Vision Sound Card

$5699

THE PATRIOT 4000 A NOTEBOOK PACKED WITH QUALITY & VALUE!

Standard Features:

- Intel SL-Enhanced 486SX-25/33, DX33/66 8K Burst Cache Built in
- 4MB (8MB, 16MB, 20MB, 32MB Optional)
- 1MB Flash ROM Programmable BIOS
- 32 Bit Local Bus Windows Accelerator 1MB RAM, Supports 1024x768 at 256 Colors
- 9.5" Viewable LCD Panel
- Ultra Fast 2.5" 170MB Hard Disk (Option: 258MB/344MB/540MB)
- Super Slim 3.5" 1.44MB Removable Floppy
- 86 Keys with reverse T
- Extra large 25mm built-in Trackball at center
- 2x Type II Slots or 1x Type III Slot
- Built-in Sound System, Microsoft Sound System and Sound Blaster Compatible
- 1x Ser., 1 Par., 1 Ext., SVGA; 1 Keyboard, 1 Docking Station Port, 1 Line in, 1 Line out, 1 Mic
- Rechargeable Ni-Cad or Ni-MH Battery, 4-8 hours with double life tech. Auto switching AC/DC adapter, 1.5 hours fast battery charge

	486DX2-66MHz 4MB RAM/344MB HD	486DX4-100MHz 4MB RAM/520MB HD
64GS MONO	$1474	$1689
Dual Scan Color	$1799	$2019
Active Matrix Color	$2797	$2999

AST ASCENTIA 910N

- 486DX2/50/75MHz
- 8 MB RAM
- 340 HD
- 10.4" Dual Scan Color
- 1.44 Floppy
- Integrated Smartpoint
- Lithium Ion Battery, up to 10 hrs.

$2599

COMPAQ LTE ELITE 4/40 CX

- 486 DX2-40MHz
- 8.4" Active Matrix
- 4 MB RAM
- 340 MB HD
- Local Bus graphics
- MS DOS/Windows

$2099

SPECIALS

CREATIVE LABS DISCOVERY CD SOUND BLASTER

- Sound Blaster 16-16 Bit Stereo Sound Card
- Double Speed, Multisession CD ROM Drive
- Stereo Speakers
- 8 Titles

$299

MULTIMEDIA QUAD SPEED KIT

- Teac Quad Speed CD ROM
- 16-Bit Sound Blaster Card
- Speakers
- MS Home Software

$379.99

[illegible]

600dpi

Now available in Postscript plus Appletalk

$719

- **NEC CDR 600 3XE Multispin, Ext., CD ROM Reader** $375
- **NEC CDR 500 3XE Multispin, Int., CD ROM Reader** $300

CLEARANCE ITEMS PRICED TO MOVE!

Compaq Contura 400C

- 4MB RAM
- 250 MB hard drive

$1999

IBM Thinkpad 355C

- 4MB RAM
- 170MB hard drive
- Fax modem

$1999

Toshiba Notebooks

T4800CT 8MB/5000MB HD (Demo)	$3600
T6600CT 8MB/540MB HD (Demo)	$4200

HEWLETT PACKARD IBM

DISCOVER VISA MasterCard AMERICAN EXPRESS

"A Name To Trust"

415/495-3422

COMPU DATA

Our 8th Year In Business

2 THIRD STREET, SAN FRANCISCO, CA 94103 • Hours: Mon-Fri 9:30-6:30 • Sat. 11-5

est Financing. 90 Days Same As Cash. Approval Within Minutes. Limited to stock for special prices. Prices subject to change w/o notice.
ot responsible for typographical errors. All brands and products are trademarks of their respective companies.

Your San Francisco Source for Quality Systems & Parts at The Lowest Prices!

Come Visit Our Showroom Today. Tons of CD Titles!

486 VLB SYSTEM

- 486 Vesa Local Bus Motherboard With 256K Cache
- Intel DX2-66 MHz
- Teac 1.44 Floppy Drive
- 4MB RAM 72pin 70ns
- 420MB Hard Disk
- Trident VLB Video Card 1MB
- 32 Bit VLB IDE Controller
- 2 Serial, Paraller,1 Game Ports
- 14" Green Monitor
- NI1024x768 .28dp
- Mini Case W/230 w/PS
- 101 Key Enhanced Keyboard
- MS Compatible Mouse w/Pad

$925.00

486 MULTIMEDIA SYSTEM

- 486 Vesa Local Bus Motherboard
- Intel DX4-100MHz CPU W/256K
- Teac 1.44 Floppy Drive
- 8MB RAM 72pin 70ns
- 540MB Hard Disk
- Windows Accelerator 32bit VLB Video Card w/1MB RAM
- VLB IDE Controller w/IO
- 2x Speed IDE CD ROM
- 16 Bit Stereo Sound Card
- Pair of Speakers
- 14" Green Monitor
- NI 1024x768 .28dp
- Medium Tower w/230w/PS
- 101 Key Enhanced Keyboard
- Microsoft Serial Mouse w/Pad

$1445.00

PENTIUM PCI SYSTEM

- Intel Pentium 90MHz Processor
- PCI EISA Motherboard/256K With Cooling Fan
- 8MB RAM 72pin 70ns
- 850MB Hard Disk
- Teac 1.44 Floppy Drive
- Diamond PCI 64 Bit PCI w/1MB Dram
- PCI Enhanced IDE Controller
- 2-High Speed Serial Ports
- 1 Parallel Port
- 15" GVC Digital Controller
- 1280x1024 0.28dp 70MHz
- Mini Tower Caes w/230w PS
- Keytronic101 Enhanced Keyboard
- Microsoft Serial Mouse w/Pad

$1785.00

SUPER MULTIMEDIA PENTIUM SYSTEM

- Intel Pentium 100MHz Processor
- Asus PCI EISA Motherboard/512K
- CPU Cooling Fan
- 16MB RAM 72pin 70ns
- 1.08GB Hard Disk
- Teac 1.44 Floppy Drive
- Diamond PCI 64 Bit PCI W/2MB DRAM
- 2-High Speed Serial Ports
- 1 Parallel Port
- 4x Speed IDE CD-ROM
- 16 Bit Sound Blaster Card
- Pair of 80Watt Speakers
- 15" GVC Digital1 controller
- 1280x1024 .28dp 70MHz
- Medium Tower Case w/230w PS
- Keytronic101 Enhanced Keyboard
- Microsoft Serial Mouse w/Pad

$2850.00

Free Estimates On Repairs | System Upgrades & Repair | System Trade-Ins | On-Site Service & Support | Local Delivery & Setup

Special Items

850MB Hard Disk	$239
CTX 17" Monitor	$595
14.4 Internal Fax Modem	$45

Sound Cards & CD ROMS

16bit Stereo Sound Card	$68
16bit Sound Blaster Card MCD	$75
16bit Sound Blaster SCSI-2	$109
Panasonic 2x CD-ROM w/Cable	$115
Sony 2x Ide Cd-Rom.	**SPECIAL $108**
Mitsumi 2x/4x CD-ROM w/Cable	$115/$189
Teac 4x CD-ROM w/Cable	$185
Toshiba 4x Scsi CD-ROM w/Cable	$182

Video Cards & Monitors

Trident VLB w/1MB	$75
S3 VLB w/1MB	$73
Cirrus Logic VLB w/1MB	$79
Diamond Speedstar VLB w/1MB	$115
Diamond Stealth 64 VLB w/1MB	$119
Diamond 64bit PCI1MB/2MB DRAM	**SPECIAL $128/$175**
Diamond 64 Bit PCI 2MB VRAM	$275
ATI Expression PCI w/1MB/2MB DRAM	$145/$189
ATI Turbo PCI 2MB VRAM	$285
14" NI .28dp 1024x768 Green	$199
Gvc15" NI Digital 7 Controller 280x1024 .28dp Green	$299
CTX 17"1280x1024 .27dp	$595
Sony 17" OEM Artmedia 11280x1024 .25 75MHz	$775

Tape Backups

Conner 250MB W/Tape	$149
Conner 420MB w/Tape	**SPECIAL $169**
Conner 850MB W/Tape	$259
Colorado 250MB	$159
Colorado 680MB	$259

Controller Cards

Isa Ide w/IO	$13
VLB IDE w/IO	$19
ISA High Speed I/O with 16550 Chip	$27
Enhanced VLB IDE w/IO 16550 Chip	$47
Promise 420 VLB with 512K Cache	**SPECIAL $108**

Cases

Mini Tower w/230W Digital Display	**SPECIAL $39**
Medium Tower w/230W Digital Display	$64
Full Tower Case Digital Display	$98

Hard Disks / Floppy Drives

420MB	$169
540MB	$179
850MB	**SPECIAL $239**
1.08GB	$348
1.2GB	**SPECIAL $369**
Teac 1.44 FD	$32
Teac 1.2 FD	$42
Teac 1.2 +1.44 Combo FD	$89

Mice / Keyboards

101 Key Enhanced Keyboard	**SPECIAL $15**
Maxiswitch 101 Keyboard	$35
Keytronic Keyboard	$35
NMB 101 Click Keyboard	$45
Microsoft New Keyboard	$96
MS Compatible Serial Mouse	$9
Microsoft Serial Mouse	$35
Logitech First Serial Mouse	$22
Logitech Trackball	$49

Fax Modems

14.4 Int/Ext	**SPECIAL $45/$78**
14.4 Voice/Fax/Modem	$65
28.8 Int/Ext/V.34	$98/$128/$139
US Robotics 14.4	$99
US Robotics 28.8 W/V.34	$225

Miscellaneous

MS DOS 6.22 (with system)	$45
Windows 3.11 (with system)	$55
Windows For WorksGroups	
Add-on	$45
Paradox For Windows 5.0 CD	$319
Microsoft & Bookshelf Profession Trade-Up Edition	$339

CD TITLES

"Kids Games" for Children	9.99
"Kids Read" for Children	11.50
101 Only the Best Games #1	9.99
101 Only the Best Games #2	9.99
11 Million Business Phone	18.99
Ace of the Pacific	18.90
Ace over Europe	18.90
All You Can Play	9.50
Arthur's Teacher Trouble	14.50
Body Works (box)	25.50
Business in Motion (box)	34.95
Business Library	7.90
CD Deluxe 4Pak (New)	13.99
CD Game Pack II Manual	11.50
Chinese Comment Idiom	12.00
Commander Blood	24.90
Compton's Interactive Encyclopedia 1995	25.00
Discoveries of the Deep	11.50
Doom II Mania!!!	11.90
Dragon Lore	22.99
Edumedia Sounds	9.99
Family Doctor (3rd Edition)	17.50
Great Naval Battles (Vol. II)	11.99
Just Grandma & Me	14.50
Learn DOS for Fun	11.90
Learn to Speak English	32.99
Learning at Home	11.50
Leisure Suit Larry 6	24.50
Mad Dog McCree II	18.50
Magician Secrets-Cards (New)	16.50
Magician Secrets-Close ups (New)	16.50
Mathematics Library	13.50
Mayo Clinic Welcome to Bodyland	18.99
Mega Race	16.50
Midi & Wave Classical Workshop	8.50
Mowgli Brother	11.50
Multimedia US History (New 95')	21.00
Music Instrument	14.95
Mutanoid Math and Word Challenge (box)	24.95
Myst	39.90
PC Library-Allegro	15.90
Police Quest Open Season	19.90
Pre School	11.95
Quantum Gate	17.90
Rise of the Robots	25.50
Sins of the Fathers	19.90
Somebody Catch My Homework	13.50
Star Wars Rebel Assault (New 15 Level)	24.50
Storyland	17.90
Talking Dictionary	16.50
The 1995 Grolier Encyclopdia	13.50
The Legend of Kyrandia	15.99
The Star Child	11.50
The Wonders of China	11.50
Time Table-Business Politics & Media	21.90
Top 201 Learning Games	11.90
US Atlas	13.50
World Atlas ver 5.01	11.50

Adult Titles

101 Sex Positions Part #1/ #2	29.90/29.90
Beach Girls	9.99
California Beauties	29.90
Deep Throat	24.90
Fantasies Interactive	25.00
Happy Time	11.90
Honey I Blew..... Everybody	21.50
I Can't Stop My Love Juice	16.90
Let You Enjoy Sensual Pleasure	18.90
Mind Teazzer II (box)	25.99
Naughty Butt Nice	25.00
Oriental	12.90
Pink Lady	11.90
Sweet Summer	11.50
Teenage Street Sluts	9.99
Titty Slickers	21.50
Touch Me, Feel Me	25.00
Voice in My Bed	24.50

Chinese Version with English Subtitles:

Interview	14.50
Love Chief	14.50
Sake Hudani	14.50
Sex Master	14.50
Summer Passion	14.50
Wild Jungle	14.50

BUY 3 CD'S
GET ANY $10^00 CD FREE

1289 21st Avenue (Between Lincoln & Irving)
San Francisco, CA 94122

Hours: Mon-Sat 9:30-7, Sun 11-5

VISA MasterCard

ACTNET
ACTNET
ADVANCED TECHNOLOGY CORP.

Tel 415-661-9000

Prices subject to change without notice. Not responsible for typographical errors. Prices reflect cash discount.

GRAND OPENING!!! Welcome!! Visit Us!!

WE DO REPAIR & UPGRADE SERVICE

Fastest Turnaround, Courteous Service

160W Speakers Only $49.95

Maxtor 1.0GB IDE Only $349

Logitech Mouseman Blowout $24.99

Optical Glass Filter Special $8.80

VISIT OUR NEW SHOWROOM TODAY!!

San Francisco Computer Center

4300 Geary Blvd. (at 7th Avenue), San Francisco, CA 94118 • Tel: 415-752-3891/92/93 • Fax: 415-752-3894

FREE CD TITLE

w/Purchase of any CD-ROM Drive, $9.99 Titles Only

New!! SANYO CD-ROM
Double Speed (250ms, 300KB/Sec)
Photo, Multi-Session, XA & CDI
Free Controller Card & Driver
*Free CD Title
Made in Japan
Best Buy!....................$105

IDE CD-ROM Drive
Photo, Multi-S, & CDI
(No controller needed)
Double Speed $115
Triple Speed $165
Mitsumi 4X...................$189

Panasonic CD-ROM
CR-562 (320ms, 300KB/Sec)
Double Speed CD-ROM
(Driver Kit & Cable for Connecting w/S.B. Series Included)
*FREE CD TITLE
Special $115

Toshiba CD-ROM
XM-3601B (120ms, 660KB/Sec)
Photo, XA, w/256KB Buffer
Quad Speed 4X (SCSI)
*FREE CD TITLE
Special..........................$295
4X IDE CD-ROM...........$190

NEW!!! Teac 4X CD-ROM
55A (195ms, 600KB/S) FAST!
$15 for Controller & Driver
FREE CD TITLE
QUAD SPEED
$175

Creative Labs Sound Card Specials

Sound Blaster 16 Basic	$68.99
Sound Blaster 16 IDE	$69.99
Sound Blaster 16 MCD	$73.99
Sound Blaster 16 MCD w/ASP	$99.99
Sound Blaster 16 SCSI	$98.99
Sound Blaster 16 MCD (Compatible)	$59.00

486 VL-BUS System

- Mini Tower Case w/230 Watt PS
- 486 Vesa Local Bus Mainboard
- 128K External Cache Memory
- 4MB SIMM Main Memory
- IDE Floppy/Hard Disk Controller
- 2 Serial, 1 Parallel Printer port
- 1.44MB Floppy Drive (3 1/2")
- **420MB IDE Hard Drive**
- 32 Bit VL-Bus SVGA Video Card w/1MB
- 14" SVGA Color Monitor (.28dp)
- 101 Key Enhanced Keyboard

Intel 486DX2-66MHz w/256K	**$888**
AMD 486DX2-66MHz w/256K	**$866**
AMD 486DX2-80MHz w/256K	**$877**
AMD 486DX4-100MHz w/256K	**$922**
Cyrix 486DX2-66MHz w/256K	**$808**
Cyrix 486DX2-80MHz w/256K	**$866**
Optional: Upgrade to PCI Mainboard & Video Card	**Add $59**

Pentium 586 PCI System

- Mini Tower Case w/230 Watt PS
- Pentium 586 PCI Mainboard
- 256K External Cache Memory
- **8MB SIMM Main Memory**
- IDE Floppy/Hard Disk Controller
- 2 Serial, 1 Parallel Printer port
- 1.44MB Floppy Drive (3 1/2")
- **540MB IDE Hard Drive**
- Cirrus Logic PCI SVGA Video Card w/1MB
- **15" Flat Screen SVGA Color Monitor (Green Energy Saving, Digital Control, 72Hz Non-Interlaced)**
- 101 Key Enhanced Keyboard

Intel Pentium 60MHz PCI	**$1388**
Intel Pentium 66MHz PCI	**$1444**
Intel Pentium 75MHz PCI	**$1488**
Intel Pentium 90MHz PCI	**$1666**
Intel Pentium 100MHz PCI	**$1899**

CD ROM KITS

Creative Labs 2X Quad Speed Kit:

$185 Special

- Creative Labs Sound Blaster 16 Stereo Sound Card
- Panasonic 2X Speed CD-ROM Drive (320ms/Sec Speed)
- Pair of Shielded Speakers
- 1 Free CD Software

Creative Labs 4X Quad Speed Kit:

$249.99 Special

- Creative Labs Sound Blaster 16 Stereo Sound Card
- Teac 55A 4X Speed CD-ROM Drive (190ms, 600KB/Sec Speed)
- Pair of Shielded Speakers
- 1 Free CD Software

BIG SALE ON CD TITLES

Buy Any of the Following CD Titles and Get **Movie Video Tape for FREE!**
Special $25 each (2 for $45)

Video for Windows Series:

The Vision
Forever
The Naked Edge
Elvis Slept Here
Jiggly Queens
Defend Your Sex
Titty Slickers
Evil Women
Southern Exposure
Wet Nurses (New)
Collectible
Biker Chicks in Love
Kelly 18
All That Sex
American Built

Special $19.95 each, your choice: WOW!! (3 for $55)

Asian Heat, Curse of The Cat Woman, Hidden Obsessions, House of Dreams, Insatible, Legends 4, Legends of Porn I, Mind Shadows, New Wave Hookers 2, Night Trips II, A Pussy Called Wanda 2, Put it in Gere, Secrets, Traci I love You, Urotsukido, Electra Sex, Cherry Poppers #1, I Married an Anal Queen, Black Attack, SweetDreams, Sizzle, Forbidden Pleasures, Nasty Scenes From The Cutting Room Floor, Private Moments, Hollywood Babylon, TrinityLoren, For Women Only, Collection Privee#1, Collection Privee#2, Collection Privee#3, Legends Clips #1, Legends Clips #2, Legends Clips #3, Legends Clips #4

XXX Japanese Adult Movie CD (Uncensored with Chinese/English Subtitles) Wild Jungle/Sake Hudani/Sex Master/Love Thief/Interview/Summer Passion.

NETWORK COMPONENTS

16 Bit Ethernet w/BNC & RJ45	Special $36.99
BNC Coax Cable 10ft/25ft/50ft/100ft	$4/8/13/18
50 Ohms Terminator or T-Connector	$4.50

CASES & POWER SUPPLIES

Mini Tower Case w/230W PS (Special)	$36.99
Medium Tower Case w/230W PS	$59
Full Size Tower Case w/250W PS	$79
Baby Desktop Case/Super Tower	$46/159

MAINBOARD WITH CPU'S

IBM SLC2-66MHz (VL-BUS) w/64K Cache w/Free Math Co-Processor	Special $128
IBM Blue Lightning 75MHz	Special $219
Intel Pentium P24T Overdrive Socket	Available
VL-BUS Mainboard 256K Cache	$88
Intel 486DX-33MHz (VL-BUS) w/256K Cache	Special $186
Intel 486DX2-66MHz (VL-BUS) w/256K Cache	$256
NEW!! AMD 486DX2-66MHz or 80MHz (VL-BUS) w/256K Cache	$209/229
NEW!! Cyrix 486DX2-66MHz or 80MHz (VL-BUS) w/256K Cache	$169/219
Intel Pentium 66MHz CPU+PCI Mainboard (ALT) w/256K	Special $445
Intel Pentium 90MHz CPU+PCI Mainboard (SIS) w/256K+CPU Cooling Fan	Special $699
Math Co-Processor for IBM SLC2-66	$10

SIMM MEMORY

1MB SIMM Modulars Memory (30 pin)	$39.99
4MB SIMM Modulars Memory (30 pin) (72 pin)	$39.99

TAPE BACKUPS

Conner 250MB Tape Backup	$149
Conner 420MB Tape Backup	$173
Conner 850MB Tape Backup	$269
Colorado 250MB Tape Backup	$138
Colorado 350MB Tape Backup	$169
Colorado 680MB Tape Backup	$275

SPECIALS OF THE MONTH

FLOPPY DRIVES

1.2MB Floppy Drive (5 1/4")	Special $39
1.44MB Floppy Drive (3 1/2")	Special $29.99

HARD DRIVES

Samsung 420MB IDE Hard Disk or 560MB	$163/173
Conner or Maxtor 540MB IDE (12ms)	Special $179
Maxtor 850MB IDE (10ms) Hard Disk	Special $244

NEW!! 14,400 VOICE/FAX/MODEM

Auto Detect Incoming Call as a Fax, Voice, or Modem
Outgoing & Incoming Voice Message up to 999 Mailbox
Page U when U have mail, Remote Retrieval & More
FREE: •Professional Voice Software $53.99

MODEMS

Zoltrix 14,400/14,400 Send & Receive Fax Modem	$46.99
NEW!! Zoltrix 14,400 Voice Fax Modem	Special $53.99
NEW!! Zoltrix 28,800 Modem/14,400 Fax	Special $94
External 14,400 Send & Recieve Fax Modem	$89
NEW!! Zoltrix 28,800 Modem/14,400 Fax w/V.34	Special $124
NEW!! Zoltrix 28,800 Modem/14,400 Fax (External) w/ V.34	Special $169

KEYBOARDS

101 Key Enhanced Keyboard	$16.99
101 *Click* Key Enhanced Keyboard	$19.99
Maxiswitch/Keytronic 101 Key Enhanced Keyboard	$33/33

MONITORS

14" Flat Screen Amber Mono	$69.99
14" Super VGA Color Monitor (.39)	$179
14" Super VGA Color Monitor (.28)	Best Price!! $189
14" Super VGA Non-Interlaced Monitor (.28)	$199.99
15" Flat SVGA (Digital Control, MRII Low)	Best Price!! $310
17" Flat SVGA (Digital Control, MRII Low)	Best Buy!! $589
Optical Glass Screen Filter	Special $8.80

HARD DISKS

Seagate 1.0GB (IDE)	$349
Samsung 420MB (14ms) /560MB	$163/173
Maxtor 540MB/1.08GB	$179/349
Conner 420MB (12ms) 1.0GB (9ms) (SCSI)	$169/469
Quantum 540MB (SCSI) /1.08GB (SCSI)	$265/549

PRINTERS

HP 540/560C (Laser Quality)	$289/499
HP 4L Laser Printer	$Call

CONTROLLERS

16 BIT IDE 2F, 2H, w/2S, 1P Ports	Special $11.50
High-Speed I/O Card w/16550 Chip	$25
32 Bit IDE 2F, 2H, w/2S, 1P Ports	$18.99
32 Bit IDE, 4H, 2F, w/2 1[illegible]	$29.99
32 Bit IDE DC420 Caching Controller w/512KB RAM	$105
32 Bit DC4030 VL-BUS Caching Controller (Exp to 16MB)	$115
Adaptec 1522c (16 Bit SCSI Controller) or 1542c	$75/169
32 Bit SCSI Controller or 16 Bit SCSI Controller	$99/69

VIDEO CARDS

Mono Card w/Printer Port	$25
SVGA Card w/256Kkb/512kb/1MB	$35/45/59
Windows Accelerator SVGA card w/1MB (65K Colors)	$69
32 Bit Vesa Local Bus Video Card w/1MB	$69
32 Bit S3 805 VL-Bus Windows Accelerator Card	$75
32 Bit Trident PCI Video Card w/1MB	$85
32 Bit Tarantula PCI Lite w/1MB (PCI)	$95
32 Bit Media Vision ProGraphic w/2MB (VLB)	$135
32 Bit Spider Plus VL-Bus 16 Million True Color Card	$95
Tarantula 64 w/S3 Chip w/2MB or 4MB (Fastest)	$285/385
Reel Magic Lite Card w/sample CD & Game CD	Special $229
MPEG Decoder Perfect for CDI Movie!!	$179

HOURS:
M-F 9:30-7, Sat 10-6, Sun 12-5

1 Year Warranty on Parts and Labor

Cash prices reflected. Credit card prices are different from cash. Not responsible for typos. Prices subject to change w/o notice.

Laptops *continued from page 48...*

extra battery pack. In any case, extras can be purchased for $99. A nice feature of this system is that the AC adapter, which will automatically detect what kind of power source you are plugging into, can connect directly to the battery pack or to the computer. It is a thoroughly nifty arrangement that has been well thought out in every detail. One of the nice aspects of this design is that you can set the machine up so the power switch either turns off the whole unit or simply places it in suspend mode. If you select the suspend option, when you turn the computer back on, you will be exactly where you left off at the end of your last session. This is a great arrangement if you use your computer frequently. The suspend memory will only hold for about three weeks. But the convenience if you use the machine often is great.

> These computers weigh just over 4lbs. including battery and measure a sleek 10″ x 8″ x 1.6″. Despite the small size, the color display measures a huge 10.4″ diagonally.

PCMCIA slots are available for either one or two Type I or II cards or a single Type III card. The system is set up so you do not have to power down to change cards. Gateway sells a wide range of PCMCIA cards or you can purchase cards from any third-party vendor.

I really like Gateway's products and the way the company is run. It provides a year warranty for equipment as well as excellent telephone support and a 24-hour turnaround warranty for an extra hundred bucks. A nice carrying case and loads of software come with the Liberty. ■

Copyright © 1995 by Ed Kahn. All rights reserved.

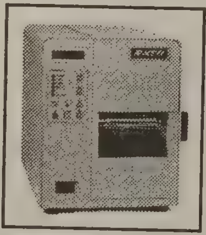
RESOURCES:

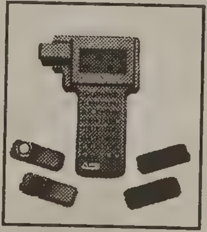
Liberty Notebook starting at $3248
Gateway 2000
610 Gateway Dr.
North Sioux City, SD 57049

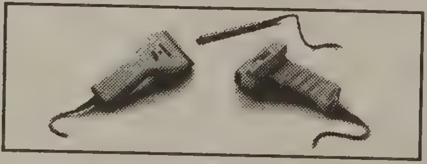
BAR CODE IS OUR SPECIALTY

Since 1985, Input Automation has been a single source for all your barcode needs; Hardware, software, consulting, and system design. Our philosophy is based on two principles: high quality industrial products, and the best technical and sales support available.

HARDWARE
- **SCANNERS:** CCD, Laser, Handheld, Fixed Mount
- **DECODERS:** Keyboard, Serial, Integrated w/Scanner
- **PRINTERS:** Thermal Transfer and supplies
- **PORTABLES:** Various configurations, RF

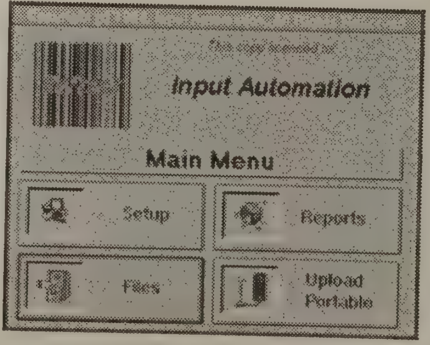






Input Automation is a Value Added Distributor for such manufacturers as Welch Allyn, Opticon, SATO, Videx, Percon, Strandware, and others. We offer COMPETITIVE RESELLER PRICING. Call to see our showroom or to speak to a sales representative.

SOFTWARE
- **WINDOWS TRACKING SOFTWARE**
- **ASSETS/INVENTORY/DOCUMENTS**
- **LABOR TRACKING/WORK IN PROCESS**
- **OFF THE SHELF OR CUSTOM APPLICATIONS**



If you have a tracking need, be it tracking of assets, documents, people, inventory, tools, etc..., Input Automation's ONTRACK was created for you. Utilizing barcode technology for data collection, ONTRACK provides database management, queries, transaction history, reports, and more. Source code available.

Input Automation

Southern California
Tel: (310) 539-3598
Fax: (310) 530-2849

Northern California
Tel: (510) 685-6563
Fax: (510) 685-2513

Call for a **free** brochure.
We accept VISA/Mastercard
Dealers Welcome

WE SELL QUALITY, RELIABILITY, SERVICE & TECHNOLOGY!

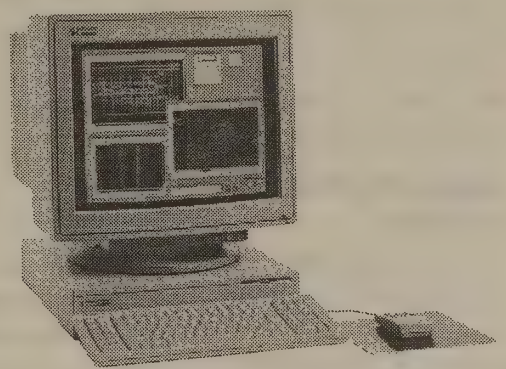
SPARC Compatible Workstation

32 MB RAM, 540 MB Hard Drive, 15" Color Monitor, Solaris 2.4

SS5/50	$3775	SS5/85	$4950
SS20/51	$6995	SS20/2x51	$8350
SS20/51	$12,925	SS20/71	$8,675
SS20/61	$7395	SS20/2x61	$10,495
HSS20/50	$8500	HSS20/2x61	$10,995

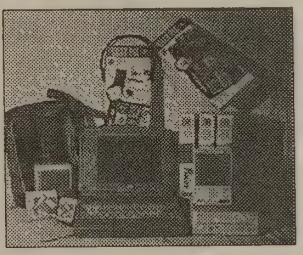
PC-To-UNIX Connection

X-Kit/DOS (PC/Link+32-bit XServer for DOS)	$150
X-Kit/NFS (A WINSOCK compliant TCP/IP, NFS, Tape Back-Up & XServer)	195
Frontier Super TCP/IP For Windows	225
Novell Lanworkplace	305
Novell Lanworkgroup 5 User	1110
SUNSELECT PC/NFS DOS/WINDOWS	325
NetManage Chameleon TCP/IP For Windows	375
AGE Xoftware/32 for Windows	285
NCD PC-XWare for Windows.	470



ONE YEAR ON-SITE SERVICE!

Notebook Computer



- *Local Bus VGA
- *Built-in Sound Card/Speaker
- *PCMCIA Type IV
- *Upgradable CPU
- *Optional Portable Desktop Docking
- *128K Ext. Cache
- *Removeable Hard Drive

8MB RAM, 250 MB HDD

MODEL	MONO	DUAL SCAN	ACTIVE MATRIX
•486DX2-66	$1625	$2075	$2625
•486DX4-100	$1725	$2155	$2775
•PENTIUM-75	N/A	$2440	$3030
•PENTIUM-90	N/A	$2625	$3225

UNIX FOR PC

Yggdrasil plug and play Linux	$29
Yggdrasil Linux Bible	32
TransAmerictech Linus/BSD	15
Prime Time Freeware for UNIX	55
Prime Time Texcetera	55
InfoMagic Internet (TCP/IP,SNMP,FTP,PPP)	19
InfoMagic Source Code (4.3 BSD,MACH,GNU)	19
InfoMagic UNIX (386BSD,NetBSD,FreeBSD)	19
Motif 1.24 for Linux	139

SunSoft (Interactive) UNIX:

Interactive UNIX/386 Base Solution (2 User)	$300
Interactive UNIX/386 Network Solution (2 User)	695
Interactive UNIX/386 Graphics Solution (2 User, Tape)	895
Interactive UNIX/386 Software Development System	555
Solaris 2.4 Desktop for x86	490
Solaris 2.4 Workgroup Server for x86	1375
Solaris Driver Developer's Kit for x86	225
Solaris 2.4 for x86 ProWorks C	975
Solaris 2.4 for x86 ProWorks C++	1455

SCO UNIX (ODT):

SCO Open Desktop 3.0 (CD-ROM)	$835
SCO Open Server Enterprise System (CD 16 User)	1425
SCO Open Desktop Development System	1190
SCO Open Server Network System (CD 16 User)	1325
SCO UNIX (2 User)	415
SCO UNIX (16 User)	905
SCO UNIX Development System	905
SCO TCP/IP for SCO UNIX	260
SCO NFS for SCO UNIX	625

Univel UnixWare 2.10:

UnixWare Personal Edition (CD-ROM)	$315
UnixWare Software Development Kit & Utilities	99
UnixWare Application Server	1165
UnixWare Server Merge for Windows	295
UnixWare NFS	155
UnixWare C2 Auditing	155
UnixWare On Line Data Manager	1755
* UnixWare Personal Edition + SDK	395

Networking

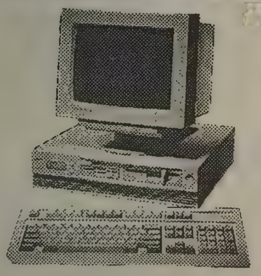
Netware 3.12 (5/10/50)	BEST PRICE
Netware 4.0 (5/10/50)	BEST PRICE
Personal Netware Starter Kit (2 Nodes, 2 NE2000,2 Software Kit)	135
NE-2000 Compatible 16-bit Ethernet Card Combo (Novell Certified)	40
10 BaseT 8 Port Hub	135
10 BaseT 16 Port Hub	279
SMC 16-bit (Coax/10BaseT)	105
SMC/NE2000 16-bit Compatible	70
Pocket LAN Card	99
3 Com 3C509 Ethernet III (TP)	105
Intel Ether Express (Combo)	115

Ready-To-Run Turnkey Solution

(Including Hardware/Software Installation, Training)

- *Netware/UNIX Server
- *Internet EMail
- *Accounting
- *Real-Estate (Residential, Apartment, Commercial)
- *Restaurant (English/Chinese)
- *Sales Tool
- *Medical
- *Legal

Our CNE Team Will Keep Your LAN In Good Working Order & Increase Productivity



PENTIUM/486 UPGRADABLE LOCAL BUS SYSTEMS

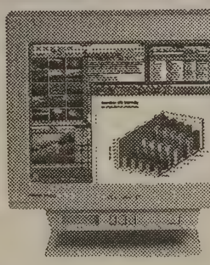
Guaranteed To Run UNIX, OS/2, Windows NT, Novell, PICK

DUAL PENTIUM/100 MHz w/EISA PCI	$2595
DUAL PENTIUM/100 MHz w/ISA PCI	2215
PENTIUM/100 MHz PCI	2030
PENTIUM/90 MHz PCI/VLB	1850
PENTIUM/75 MHz PCI	1660
486/100 MHz VLB	1390
486/80 MHz VLB (AMD)	1290
486/66 MHz VLB (AMD)	1235
UPGRADE 486 VLB TO PCI	Add 75

- 256K Cache, 8 MB RAM
- Mid Tower Case w/250W UL PS
- 540 MB HD, Teac 1.44 MB FD
- PCI or VLB IDE Controller with 2S/1P
- Local Bus 1MB SVGA Card
- 15" .28 NI SVGA Monitor (1280x1024)
- Microsoft Serial Mouse
- Keytronics 101-Key Keyboard

IDEK MF-8617 17" Monitor

- •17" Flat Screen
- •.26mm Dot Pitch
- •1600x1200 @ 66 Hz
- •1280x1280 @ 80 Hz
- •Microprocessor Controlled
- •Low Radiation
- •Energy Star Auto-Size
- •3 Years Warranty



$769

*VisionMaster MT-9121 21" $1880

Monitor/Video Cards

S3 864 1 MB	$105
Cardex ET4000/W32PVLB/1/2MB	110/163
Orchid Kelvin VLB 1MB	135
ATI Ultra Pro 2MB/VLB/PCI	235
Diamond Stealth 64 2MB VRAM	295
14" NI SVGA (.28mm) Monitor	215
15" NI Monitor 1280x1024	299
ADI 17" (1280x1024 .26mm Dot Pitch)	720
Hitachi 20" (1280x1024 .31mm Dot Pitch)	1335

Tape Back-up Options

Wangtek 250MB SCSI 1/4" Tape Drive	$310
Wangtek 500MB SCSI 1/4" Tape Drive	450
Wang DAT 3400 8-GB 4mm DAT Drive	1075
Wang DAT 3200 4-GB 4mm DAT Drive	850
Exabyte 8505 5-10 GB 8mm Tape Drive	2050
Exabyte 8205 2-GB 8mm Tape Drive	1345

Hard Drive/Controllers

Adaptec 2940 PCI SCSI Controller w/Kit	$255
Adaptec 2842 Local Bus SCSI Controller w/Kit	255
Adaptec 1542C SCSI Controller w/Kit	245
Adaptec 2742A EISA SCSI Controller w/Kit	365
Bus Logic 4455S Local Bus SCSI Controller w/Kit	210
NCR 53C810 PCI SCSI Controller	60
Bus Logic 946S PCI Controller	275
420 MB IDE Hard Drive	185
520 MB IDE/SCSI Hard Drive	200/225
1.0 GB IDE/SCSI Hard Drive	395/540
2 GB SCSI Hard Drive	950
9 GB SCSI Hard Drive (9ms)	3695
External Hard Disk For Sparc/PC/Mac	Add 60

Motherboards

Dual Pentium 90/100MHz (PCI/ISA) w/256K Cache	$410
Pentium 90/100MHz (PCI) w/256K Cache	215
Pentium 66 MHz (PCI) w/256K Cache	280
486DX/100 (VLB) w/256K Cache	99
486DX/100 (PCI) w/256K Cache	125

Multimedia-FREE Installation

CD-ROMS		SOUND CARDS	
NEC 3xi (SCSI)	$230	Sound Blaster 16 MCD	$83
Panasonic CR562 (AT BUS)	145	Sound Blaster 16 ASP	130
Sony 33A (IDE)	125	Sound Blaster SCSI II	112
Toshiba 3501 4x SCSI	315	Sound Blaster SCSI II/ASP	157
Chinon 2XSCSI	195	75 Watts Stereo Speakers	60
CD-ROM Ext. Kit	60	CD TITLES	CALL

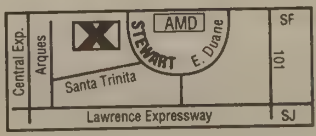
Some Of Our Satisfied Customers:

- AMD
- Cadence
- DCA
- Ford
- Fujitsu
- IBM
- ISSI
- Lockheed
- McDonald Douglas
- Microsoft
- Quantum
- San Jose State
- Santa Clara Univ.
- Stanford Univ.
- Winbond

Since 1990

PromoX Systems

The Network/UNIX/X/Windows Solutions Provider



Tel: (408) 733-2966
Fax: (408) 733-2968
E-Mail Tech Support: tech@promox.uucp.netcom.com
Sales: sales@promox.uucp.netcom.com
Hours: Mon-Fri 9-6 Sat 10-4
1008 Stewart Dr., Sunnyvale, CA 94086
Prices Subject to Change w/o Notice

Sparc registered trademark of Sparc International Inc.

Win 95 Vs. OS/2 Warp

continued from page 157...

more thoroughly fortified. Both operating systems offer a TCP/IP dialer to establish a SLIP or PPP connection, but Warp's Bonus Pak also includes a graphic World Wide Web browser, telnet, ftp, and Usenet NewsReader. This advantage of Warp has to be considered in light of the fact that a few hours of diligent downloading will easily yield up equivalent freeware and shareware utilities for a Win 95 user.

The Internet mail management packages offered by both Microsoft and IBM are awkward and unwieldy. Ten minutes with Qualcomm's excellent Eudora for Windows package should be enough to convince users on either side of the fence to switch to a third-party brand.

Win 95 also balances IBM's Internet support by offering a browser for its own Microsoft Network. Currently in a beta state, Microsoft Network is expected to allow subscribers access to Usenet newsgroups, local forums, Internet mail, and also provide online access to multimedia packages like Microsoft Bookshelf and Encarta.

One further note on the subject of networking: IBM will be releasing Warp Connect at the same time or before Microsoft releases the final version of Win 95. Warp Connect is a fully network-enabled version of OS/2, currently in beta. It includes all of the LAN support and connectivity features that should have been in the original upgrade.

DOS Compatibility

Both Win 95 and OS/2 Warp are first-rate in this department, automatically recognizing and configuring a large number of DOS programs.

Both operating systems provide smoother integration of DOS programs into the graphic interface than Windows 3.1. Win 95 gets extra points for providing a graphic pop-up toolbar in each DOS window that allows you to cut and paste, or change the font with a single mouse-click. Taking a leaf from previous versions of OS/2, Win 95 has joined Warp in creating a "settings book" for each DOS application, accessible by right-clicking on the application and selecting a "Properties" option. The Windows 3.1 PIF Editor is history.

OS/2 Warp gains points for its large "migration database" of DOS programs, complete with hundreds of system settings established simply by typing the program's name on a blank template icon.

Hardware Considerations

Both IBM and Microsoft claim minimum requirements of a 386DX machine, 4MB of RAM, VGA graphics adaptor, and mouse, with 35MB to 60MB of available hard disk space.

Ease Of Installation/Ease Of Use

Despite tremendous improvement by IBM of the OS/2 Warp installation procedure, many people still find it a bit problematical. Microsoft's Win 95 definitely has the edge in terms of ability to recognize a larger variety of motherboards, video displays and adapters, SCSI controllers, CD-ROM drives, etc. The Win 95 installation routine is, even in beta, very stable, automatically detecting and configuring a wide range of system peripherals.

With OS/2 Warp, the consensus is that you can be lucky with the right hardware and have a trouble-free installation, but you're also more likely to have video, SCSI, and CD-ROM problems stemming from unsupported devices.

Once you're up and running, the ease-of-use issue is largely a matter of personal preference. My personal feeling is that Win 95 does a good job of meeting Microsoft's stated goal: providing intuitive access to the basic features users will call upon most frequently. Win 95 is simpler on the surface, with Wizards that automatically make choices for you and an excellent context-sensitive help system. The Win 95 help system includes a series of hypertext troubleshooting menus that can help you resolve common configuration problems. Warp OS/2 also has a well-organized online help system, but you must pursue it actively in order to track down information.

If you're already a DOS or Windows 3.1 user, you should easily adapt to Win 95. Win 95 actually includes its own version of DOS, almost identical to MS-DOS v6. For the most part, it allows you to ignore this substructure, minimizing but not completely eliminating the need for a Config.sys or Autoexec.bat. You can also boot to a real mode command prompt for "DOS 7," or even dual-boot back to a previous version of MS-DOS and Windows 3.1. The more of these additional options you exercise, the more you'll need your old, hard-won DOS and Windows lore.

Users who interact with OS/2 Warp only to open folders and launch programs should find it as easy and intuitive as Windows 3.1 or Win 95. But OS/2 is not just DOS or Windows. There's a powerful, well-oiled machine beneath the surface, and driving it well requires some time and practice. ■

Copyright © 1995 by Lenny Bailes. All rights reserved.

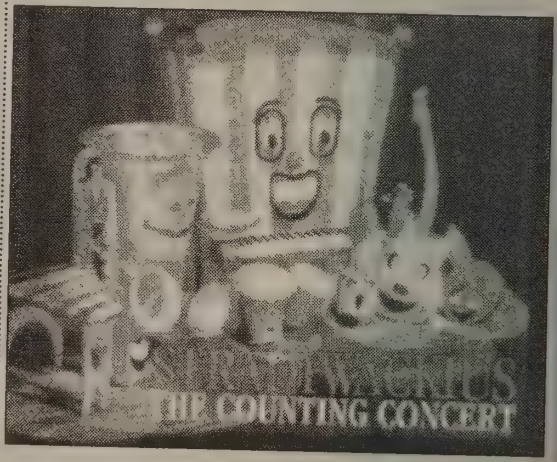
Product Spotlight

Product Reviews

continued from page 212...

sound—with solid learning objectives.

The format is an airport travel adventure that offers a variety of lessons and tests in the form of "passports" to travel destinations. You arrive at one of many screen shots of your chosen destination, such as Greece or the Bahamas, then choose accompanying music, such as classical, reggae, or Broadway, to listen to as you type. The result is a nonintimidating environment, so friendly that learning is almost effortless. Multimedia Typing Instructor really shows off the potential of multimedia as a teaching and learning tool. It keeps its promise to take the tedium out of typing and makes typing fun. (Individual Software, Inc. 1-800-822-3522)



Stradiwackius, The Counting Concert

Published By: T/Maker
For: Windows 3.1, 486, at least 4MB ram
List Price: $19.95
Reviewed By: Isaac C. Dziga

Stradiwackius, the Counting Concert, is a fanciful expedition into the magical world of music for young children. You enter a library and are met by three worms. Wendy teaches you about words and languages. Albert has a large knowledge of facts, and wants to share them with you. Pablo the artist helps you paint pictures of different instruments, and also lets you create fanciful instruments. The whole

MIC
COMPUTER

MULTI-INTEGRATION CORPORATION

SPECIAL EVERYDAY LOW PRICES !!!

SUPER INTEL P5 SYSTEMS

INTEL P5 PCI M/BOARD W/256K
8MB 72 PIN SIMM FAST RAM
420MB CONNER OR MAXTOR
CPU HEATSINK / COOLING FAN
TEAC 1.44MB FLOPPY DRIVE
S3 PCI WINDOWS GRAPHICS W/1MB
IMPRESSION HIGH RESOLUTION
MONITOR 1024X768 NI .28
ENHANCED PCI IDE FAST I/O 16550
MITSUMI 101 ENHANCED KEYBOARD
GREEN TOWER CASE W/230W PS
MS MOUSE COMPATIBLE W/PAD
NE2000 NETWORK CARD 3 IN 1

P5 - 60Mhz	**$1,278**
P5 - 75Mhz	**$1,348**
P5 - 90Mhz	**$1,558**
P5 - 100Mhz	**$1,738**

SUPER 486 SYSTEMS

MIC 486DX4 M/BOARD W/256K
4MB 72 PIN SIMM FAST RAM
420MB CONNER OR MAXTOR
CPU HEATSINK / COOLING FAN
TEAC 1.44MB FLOPPY DRIVE
S3 VLB WINDOWS GRAPHICS W/1MB
IMPRESSSION HIGH RESOLUTION
MONITOR 1024X768 NI .28
ENHANCED VLB IDE CONTROLLER
MITSUMI 101 ENHANCED KEYBOARD
GREEN TOWER CASE W/230W PS
MS MOUSE COMPATIBLE W/PAD
NE2000 NETWORK CARD 3 IN 1

486DX33 or 40Mhz		**$878**
486DX	**66Mhz**	**$915**
486DX2	**80Mhz**	**$926**
486DX2	**100Mhz**	**$1,018**

MIC TOP MULTIMEDIA SYSTEMS

VLB PCI MOTHER BOARD W/256K CACHE
4MB RAM (8MB FOR PENTIUM SYSTEMS)
420MB CONNER OR MAXTOR
CPU HEATSINK / COOLING FAN
TEAC 1.44MB FLOPPY DRIVE
VLB/PCI WINDOWS GRAPHICS W/1MB
IMPRESSION HIGH RESOLUTION
MONITOR 1024X768 NI .28
ENHANCED VLB/PCI IDE CONTROLLER
MITSUMI 101 ENHANCED KEYBOARD
GREEN TOWER CASE W/230W PS
MS MOUSE COMPATIBLE W/PAD
NE2000 NETWORK CARD 3 IN 1 COMBO
SONY X2 SPEED CD ROM
16 BIT SOUND CARD W/HI-FI SPEAKERS
42 CD ROM GAME TITLES

486DX2	**50Mhz**	**$1,087**
486DX2	**66Mhz**	**$1,107**
486DX2	**80Mhz**	**$1,127**
486DX4	**100Mhz**	**$1,187**
P5 -	**60Mhz**	**$1,497**
P5 -	**66Mhz**	**$1,517**
P5 -	**75Mhz**	**$1,578**
P5 -	**90Mhz**	**$1,788**
P5 -	**100Mhz**	**$1,955**

NEXTGEN PENTIUM SYSTEM $CALL

MOTHER BOARDS W/O CPU

AIR486SH VLB W/256K (30PIN)	$115
AIR486SH VLB W/256K (72PIN)	$121
AIR486MI VLB W/256K (72PIN)	$185
AIR486MIS VLB W/256K (72PIN)	$208
AIR486VP VLB&PCI W/256K(72PIN)	$178
MIC486DX4 VLB W/256K	$118
MIC486DX4 PCI W/256K	$158
OPTI/P5/60/66Mhz VLB/PCI W/256	$198
CIR P5/75-120Mhz VLB/PCI W/256	$228
INTEL P5/60/66Mhz PCI W/256K	$268
INTEL P5/90Mhz PCI W/256K	$298

CPU

AMD	486DX	40Mhz (5V)	$128
AMD	486DX2	66Mhz (3V)	$128
AMD	486DX2	66Mhz (5V)	$158
AMD	486DX2	80Mhz (3V)	$148
AMD	486DX2	100Mhz (3V)	$198
INTEL	486DX2	50Mhz	$148
INTEL	486DX2	66Mhz	$178
INTEL	486DX4	100Mhz	$258
INTEL	P5	60Mhz	$278
INTEL	P5	66Mhz	$308
INTEL	P5	75Mhz	$338
INTEL	P5 (new)	90Mhz	$556
INTEL	P5	100Mhz	$698

PRINTERS

BROTHER LASER HL-630	$393
HL-645	$433
HL-655	$563
HL-660	$663
PANASONIC	
KXP2023 (24Pin)	$169
KXP2130 (24Pin) Color upgradbl	$208
KXP3624 (24Pin)	$397
KXP4400 Laser w/Postscript	$449
HEWLETT-PACKARD	
HP DeskJet 540 / 560C	$283/$463
HP LaserJet 4 / 4Plus	$1,217/$1,365
HP LaserJet 4L / 4P	$489/$925
KXP4400 LASER w/Postscript	$449

CONTROLLERS

IDE 2FD/HD	$9
IDE ISA 2FD/2HD W/ 2S/1P/1G	$12
IDE PCI/2HD	$28
IDE VLB 2FP/2HD WINDBOND	$19
IDE VLB 4FP/4HD FAST I/O 16550	$34
IDE PCI 4FP/4HD FAST I/O 16550	$39
ADAPTEC 1522B (SCSI)	$75
ADAPTEC 1542CF (SCSI)	$164
ADAPTEC 1542CFK w/Kit (SCSI)	$226
ADAPTEC 2842 VLB (SCSI)	$196
ADAPTEC 2940 PCI (SCSI)	$192
ADAPTEC 2940W PCI (Wide SCSI)	$236
ADAPTEC 2942 PCI (SCSI)	$288

VIDEO GRAPHIC CARDS

TRIDENT SVGA 16 BIT W/1MB	$56
TRIDENT VLB/PCI W/1MB	$72
GENOA	
GENOA VLB 8500 W/1MB	$85
PHANTOM 64 VLB/PCI W/2MB	$188
ATI	
ULTRAPRO PCI 2MB VRAM MACH32	$211
ULTRAPRO VLB 2MB VRAM MACH32	$208
ULTRAPRO EISA 2MB VRAM MACH32	$249
WINBOOST PCI/VLB 1MB MACH64	$135
WINBOOST PCI/VLB 2MB MACH64	$175
WINTURBO 64 PCI/VLB 2MB VRAM	$254
WINTURBO 64 PCI/VLB 4MB VRAM	$442
ORCHID	
FAHRENHEIT 64 VLB/PCI 2MB VRAM	$268
FAHRENHEIT 64 VLB/PCI 4MB VRAM	$398
KELVIN 64 VLB/PCI 1MB DRAM	$116
KELVIN 64 VLB/PCI 2MB DRAM	$164
HERCULES	
Stingray VLB/PCI w/1MB DRAM	$95
Dynamite Pro VLB/PCI 1MB DRAM	$149
Dynamite Pro VLB/PCI 2MB DRAM	$176
Dynamite Power VLB 1MB DRAM	$158
Dynamite Power VLB/PCI 2MB DRAM	$185
GraphiteTerminator 64 VLB 2MB DRAM	$208
GraphiteTerminator 64 PCI 2MB DRAM	$208
GraphiteTerminator 64 VLB 2MB VRAM	$298
GraphiteTerminator 64 PCI 2MB VRAM	$298
GraphiteTerminator 64 VLB 4MB VRAM	$439
GraphiteTerminator 64 PCI 4MB VRAM	$439
GraphiteTerm.Professional PCI 4MBVRAM	$498
GraphiteTerm.Professional VLB 4MBVRAM	$498
DIAMOND	
Viper VLB/PCI 2MB VRAM	$241
Stealth 64 VLB/PCI 2MB DRAM	$156
Stealth 64 VLB/PCI 2MB VRAM	$258
Stealth 64 VLB/PCI 4MB VRAM	$395/$387

TAPE BACKUP / CD ROM

TAPE BACKUP	
CONNER 250MB INT	$126
CONNER 420MB INT	$156
CONNER 850MB INT	$259
COLORADO 250MB INT	$129
COLORADO 340MB INT	$157
COLORADO POWER 1GB INT (SCSI)	$588
COLORADO POWER 2.4GB INT (SCSI)	$Call
CD ROM	
SONY X2 SPEED CDU55E IDE w/Kit	$108
PANASONIC X2 SPEED P562 IDE w/Kit	$112
PANASONIC X4 SPEED 579BP w/Kit	$178
TEAC X4 SPEED CD-55A IDE	$178
TOSHIBA X4 SPEED T3501B SCSI	$277
TOSHIBA X4 SPEED T3601B SCSI (new)	$298
TOSHIBA X4 SPEED XM-T3501BE Ext.	$397
NEC X4 SPEED CTR511 SCSI	$288
MITSUMI X4 SPEED MSM400K IDE	$178
MITSUMI X2 SPEED	$108
CHINON X2 SPEED SCSI	$185

HARD DRIVES

CONNER	
425MB IDE (CFA425A) 14MS	$164
540MB IDE (CFA540A) 12MS	$184
850MB IDE	$240
1.2GB IDE (CFP1275A) 12MS	$368
1.08GB FSCSI II (CFP1080S) 10MS	$449
2GB FSCSI II (CFP2105S/2107S) 9MS	$Call
MAXTOR	
420MB IDE (7420AV) 12MS	$170
540MB IDE (7540AV) 12MS	$184
853MB IDE (7850AV) 12MS	$240
1.0GB IDE (71050A) 12MS	$338
1.26GB IDE (71260A) 12MS	$358
QUANTUM	
540MB IDE (QT540A) 14MS	$184
540MB SCSI (QT540S) 12MS	$205
1.08GB SCSI (QT1080S) 10MS	$Call
2.1 GB SCSI (QT2100S) 9MS	$858
WESTERN DIGITAL	
540MB IDE (WDAC2540) 11MS	$206
730MB IDE (WDAC2700) 10MS	$236
850MB IDE (WDAC2850) 10MS	$249
1.08GB IDE (WDAC31000)10MS	$358
1.2GB IDE (WDAC31200) 9MS	$364
SEAGATE	
420MB IDE (ST3491A) 14MS	$165
1.05GB FSCSI-2 (ST31230N/W) 10MS	$529
2.14GB FSCSI-2 (ST32550N/W) 8.5MS	$968
4.2GB FSCSI-2 (ST15230N/W) 10MS	$1,298
4.29GB FSCSI-2 (ST15150N/W) 8.5MS	$1,428
9.08GB FSCSI-2 (ST410800N/W)12MS	$2,728

SOUND CARDS / SPEAKERS

SOUND BLASTER PRO VE	$71
SOUND BLASTER 16 BASIC VE	$92
SOUND BLASTER 16 MCD	$98
SOUND BLASTER 16 SCSI II	$118
SOUND BLASTER AWE32	$227
ACER 16 BIT SOUND CARD	$49
MEDIA MAGIC 16 SOUND	$62
MEDIA VISION PRO-AUDIO 16	$56
MEDIA VISION JAZZ 16	$52
SPEAKERS	
J-S SPEAKER 112W HIFI	$68
J-S SPEAKER 112W ENHANCED	$85
J-S SPEAKER 224W 2 WAYS HIFI	$99
J-S SPEAKER 300W 2 WAYS HIFI	$195
J-S SPEAKER 300W 3 WAYS HIFI	$199
J-S 300W SUB WOOFER SYSTEM	$248
J-S POCKET SPEAKER J-009	$12
SPEAKER EP80 80W 2 WAYS HIFI	$55

MOUSE / KEYBOARDS

LOGITECH FIRST MOUSE	$25
LOGITECH SERIAL MOUSE	$19
MICROSOFT SERIAL MOUSE	$25
MS MOUSE COMPATIBLE 400DPI	$9
MITSUMI 101 ENHANCED KEYS	$14
NMB 101 ENHANCED KEYS	$39
KEYTRONICS 101 ENHANCED KEYS	$22
FOCUS FK2001 101 ENHANCED KEYS	$28
FOCUS FK9000 PROGRAMMABLE	$48

MONITORS

EYEQ VGA MONO	$82
SVGA 14" 1024X768 .28 NI	$195
EXVIEW 14" .28 NI DIGITAL	$225
KFC 14" MULTI FREQ.	$238
IMPRESSION 3 PLUS .28 NI	$229
MAGNAVOX	
15" 1024X768 .28 NI	$338
15" 1280X1024 .28NI	$368
VIEWSONIC	
14" 6E	$241
15" 15ES 1024X768 .28	$325
15" 15G 1280X1024 .28	$369
15" 15 1280X1024 .27	$399
17" 17 1600X1280 .27	$793
17" 17E 1280X1024 .28	$661
17" 17G 1280X1024 .28	$681
20" 20G 1600X1280 .28	$1,223
21" 21PS 1600X1280 .25	$1,590
SONY	
15" 15SF 1280X1024 .25	$402
17" 17SF 1280X1024 .25	$822
17" 17SE 1600X1280	$945
20" 20SE 1600X1280	$1,748
NEC	
15" 15XE	$523
15" 15XP	$643
17" 17XE	$943
17" 17XP	$1,183
21" 21XE	$1,893
21" 21XP	$2,327
SAMSUNG	
17" SYNCMASTER GLS	$838
20" SYNCMASTER 6C	$1,498
PROTON	
14" MTR14NGS W/SPEAKERS	$248
15" MTR15NGS W/SPEAKERS	$346
14" MTR14NG	$Call
15" MTR15NG	$Call

NETWORK / FAX MODEM

16 BIT ETHERNET COMBO	$39
3COM	
3C509 ELINK III Coax / 5Pack	$102/$456
3C509 ELINK III TP / 5Pack	$76/$406
3C509 ELINK III Combo / 5Pack	$116/$486
3C509 ELINK III EISA Coax/TP	$218/$219
SMC	
ELITE ULTRA 16 Coax / 6Pack	$98/$445
ELITE ULTRA 16 TP / 6Pack	$96/$395
ELITE ULTRA 16 Combo / 6Pack	$108/$489
ELITE ULTRA 32 EISA Combo	$208
DIGIBOARD	
DATAFIRE 1BRI, 2B, 1D	$468
PC IMAC/4-1 1BRI, 2B, 1D	$698
FAX MODEM	
USROBOTICS Sportster 14.4K Int	$88
USROBOTICS Sportster 14.4K Ext	$107
USROBOTICS Sportster 28.8K Int	$187
USROBOTICS Sportster 28.8K Ext	$235
SUPRA Express 14.4K Int	$85
SUPRA Express 28.8K Int	$182

" PLEASE CALL FOR MORE UNLISTED ITEMS "

WE ALSO HAVE GOOD LEASE AND FINANCING PROGRAM

WE SPECIALIZE IN THE FOLLOWING SERVICES:
OFFICE AUTOMATION / ENGINEERING COMPUTER SYSTEM / CUSTOM CONFIGURATION / SYSTEM UPGRADE
COMPLETE NETWORK DESIGN AND INSTALLATION / ON SITE MAINTENANCE SERVICE CONTRACT
WE DELIVER THE BEST VALUE OF QUALITY, SERVICE AND PRICES

TERMS AND CONDITIONS

1/ 1 YEAR PARTS , 3YEARS LABOR ON SYSTEM.
2/ PRICES AND AVAILABILITY SUBJECT TO CHANGE WITHOUT NOTICE.
3/ UNLIMITED TECHNICAL PHONE SERVICES OR IN HOUSE SERVICES.
4/ 15% RESTOCKING FEE ON ALL RETURN ITEMS WITHIN 7 DAYS EXCLUDES PERIPHERALS AND SOFTWARES. NO REFUND AFTER 7 DAYS.
5/ NO RESPONSIBLE FOR TYPOS.
6/ COMPANY PURCHASE ORDERS ARE WELCOMED AND SUBJECT TO APPROVAL

TEL : (408) 238-8887 / 238-8878 ; FAX : (408) 238-8895
2670 So. WHITE RD SUITE #100 SAN JOSE, CA.95148 . HOURS: 9:30AM - 7:00PM SAT: 10:00AM - 5:00PM CLOSE SUNDAY

game is centered around a lesson of counting from one to ten. It begins with "one Piano painted like a clown," and progresses to "two electric guitars," and goes through all the first ten numbers. Another fun aspect of this game is that you can play it in English, Spanish, French, and German. Using this, children can learn to count not only in English, but in three other languages as well. (T/Maker Co., 1390 Villa St., Mountain View, CA, 94041. 415/962-0195)

The Magic School Bus Explores The Human Body

Published By: Microsoft
For: Microsoft Windows
List Price: $49.98
Reviewed By: Isaac C. Dziga

Based on the successful series of books and cartoons, The Magic School Bus Explores the Human Body CD-ROM is a multimedia voyage through the body of Arnold, a student in Miss Frizzle's fourth grade class. You begin the game in the classroom where you can talk to each student, and play games relating to the anatomy. Once you have entered Arnold's body, it is your job to navigate through twelve areas of the body before you are allowed to leave. In each part of the body, you can examine the reports about that part written by your fellow students. You can also play games about each body system on Ralphie's video game player. Through playing this game, young children, older children, and adults alike can all learn a little more about the human body. As you peer out the bus windows into each part of the body, you can see objects floating around that you can click on and learn more about. The animation sequences as you travel from body system to body system are really superb. You really feel like you have entered the body of another person. This game comes with a passport where you can affix stamps for each area you've traveled. My four-year-old brother is a fan of *The Magic School Bus* cartoon, and really enjoyed this game. Now any time I turn on the computer I hear, "Isaac, can we go to the esophagus?" (Microsoft Corp., One Micorsoft Way, Redmond, WA 98052-6399. 206/882-8080)

Entertainment Reviews

SimCity 2000

Published By: Maxis
For: Macintosh, System 7.0 required; also for MS-DOS, and Windows 3.1
List Price: $54.95
Reviewed By: Isaac C. Dziga

The latest incarnation of the SimCity dynasty, SimCity 2000 lives up to the Sim family name. The successor to the 1989 hit SimCity, SimCity 2000 lets you do all SimCity could and more. You are cast as the mayor of a brand new city and must balance the budget, provide transportation, power, sewage, and homes all while controlling the pollution of your city. You must also provide libraries, museums, and universities to educate your citizens (sims). This game has great graphics of all the buildings, and has four levels of zoom from seeing your whole city on screen to seeing just a few buildings. It also gives you a lesson about the jobs your elected officials should be doing. When you begin to feel the tedium of responsibility for thousands

DISCOVER THE CUPERTINO COMPUTERS DIFFERENCE!
LARRY WOOD – OWNER
386DX-40 C128 ....$375
486DX2-50 C256 VLB 449
486DX2-66 C256 VLB 499
486DX2-80 C256 VLB 519
486DX4-100 C256 VLB........539
PENTIUM-90 C256 PCI 1029
PENTIUM-100 C256 PCI.....1229
1 YEAR PARTS, 3 YEAR LABOR WARRANTY ON ALL SYSTEMS
MON-FRI 10:00-6:00
SATURDAY 11:00-4:00
SALE PRICES FOR CASH CUSTOMERS NO CREDIT CARDS
Corporate P/O's Welcome
Prices & availability subject to change w/o notice
STANDARD SYSTEM: Motherboard & CPU, 4MB RAM, Desktop or Mini Tower Case, 230 Watt Power Supply, 101 Key Enhanced Keyboard, 2 Hard/2 Floppy Disk 1:1 Controller Card, AMI Bios, 1.2 or 1.44 MB Floppy Drive, 2 Serial/Parallel/Game I/O Ports.
CUPERTINO COMPUTERS INC.
10675 S. DE ANZA BLVD.,
TEL: (408) 255-5997
CUPERTINO, CA 95014
FAX: (408) 255-7699

HAVE QUESTIONS...CALL THE TECHNICAL EXPERTS
We specialize in vertical markets. Call us for the right solution for your needs.
BUSINESS INTEGRATION • INTERACTIVE • DATA RECOVERY
Tektronix IBM COMPAQ QMS NEC
SCO NOVELL. HEWLETT PACKARD ALR TOSHIBA
GIGABYTES
Trust Us, We're Different
Quality Service & Upgrades • On-Site & In-Shop Service
(510) 440-8032 FAX (510) 440-9099

of living, breathing sims, you can always unleash a few tornadoes, earthquakes, fires, or jet crash.

Afraid your wonderful SimCity Classic city is gone forever? Not to fear, you can import your old cities into SimCity 2000. (Maxis, 2 Theatre Sq., Orinda, CA 94563-3346. 510/254-9700)

Under A Killing Moon

Published By: Access Software
For: Windows 3.1
List Price: $99.95
Reviewed By: Isaac C. Dziga

Under a Killing Moon is the closest thing to an "interactive movie" that I've ever seen on CD-ROM. You are Tex Murphy, a P.I. in the year 2042. Tex lives in a run-down area of Old San Francisco, and lives from paycheck to paycheck hunting down small-time crooks. The story begins with Tex hunting down a pawn-shop thief on Day One, with every day that goes by revealing a larger piece of a puzzle. By the end of the week you find the whole case, which began as a simple pawnshop robbery, turning into a huge multinational conspiracy involving genetic manipulation and all sorts of evil stuff. You see your world through the eyes of Tex Murphy, using the keyboard or mouse to walk around. You can toggle to "interactive mode" where you can examine objects, turn machines on and off, open doors, and generally explore. You can also talk to people, and you are presented with choices of phrases that will either endear the person to you or make them never give you information again. My only gripe with this game is that it needs a powerful computer. The manual recommends a 486DX2-66 with 16MB of RAM and a 16-bit sound card. The game will run with less, but not very well. With a cast including James Earl Jones and Margot Kidder, and a full 2.3GB of data, this game really is a winner. (Access Software, Inc., 4910 W. Amelia Earhart Dr., Salt Lake City, UT 84116. 801/359-2900) ■

Under a
Killing Moon

Make Your Plans Now to Attend the California Computer Expo

The Largest Consumer Computer Show on the West Coast Takes Place August 17–20 in San Diego

Held at the San Diego Convention Center, the Expo features more than 400 Exhibits and 230 Seminars in a festive, family atmosphere.

"The Computer Vacation for the Entire Family"

Internet • Windows 95 • OS/2 Warp
Virtual Reality • Kids' Corner • Newton
Computer Concerts • Weird Software
Desktop Video • Networking • CyberFest
Doom Challenge • PC Karaoke
and Much, Much More!

A **$25 Seminar Passport** admits you to ***all Expo events*** over four days and allows you to reserve space in up to six seminars (although you may attend as many seminars as time and space permit). ***Seminar Passports are limited. Make your reservations early!***

***The California Computer Expo* Preview and Seminar Schedule** *Is Now Available!*

Your *Preview and Seminar Schedule* contains everything you need to register for the Expo. If you have any trouble locating one at a computer store, library, or school near you, please call us directly at (800) 573-3247.

THE CALIFORNIA COMPUTER EXPO

California Computer Expo
August 17–20, 1995
San Diego Convention Center
111 West Harbor Drive
San Diego, California
(800) 573-3247
(619) 573-0617

Cosponsored by ComputorEdge Magazine and the San Diego Computer Society.

CENTRAL
COMPUTER SYSTEMS, INC

WIDE SELECTION AT LOW PRICES

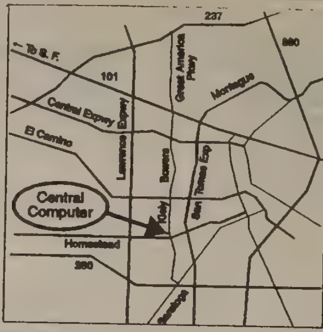
Since 1986
TEL: (408) 248-5888
TEL: (408) 241-0185
FAX: (408) 241-0390

820 Kiely Blvd.
Santa Clara, CA 95051
(between Homestead & Kaiser hospital)

Email Address : CentOn@aol.com

Mon - Fri: 9 AM - 7:30 PM
Sat - Sun: 10:30AM - 6 PM

OPEN 7 DAYS



- No surcharge for Visa, MC, Discover & Amex
- Gov't, universities and qualified firms purchase orders accepted on approved credit
- Financing plan available OAC
- Reseller and quantity pricing available
- Prices are subject to change without notice and to stock on hand
- Not responsible for typographical errors
- Special order for items not listed available

Please contact, for :
- Corporate acct. sales – Josephine, Tom
- Japan acct. sales – Bonita
- Germany, Sweden sales – Ann
- Local sales – Alex, John, Lynn
- Tech. Support – Edwin, Jim

SYSTEMS

Central System # 1 : 486 Green VLB

Intel 486-DX2-66 CPU
CPU Cooling Fan
4MB RAM Memory (4 of 30-pin, 70-ns Simm)
Teac 1.44MB Floppy
IDE & FD Controller & I/O (2S 1P)
Baby Tower Case w. 200W Power
Spill Resistant 101 Keyboard
Conner or Maxtor 420MB IDE Hard Drive
Oak 087 Super VGA 1MB Card
Standard Technology 14" 1280 x 1024 .28 NI Monitor
Microsoft Serial Mouse

LYNX / SHUTTLE 486-DX2-66 ISA VLB	**$1095**

Special : 486 PCI

LYNX 486-DX4-100 4PCI 2VLB	**$1210**

Intel 486-DX4-100 CPU
4MB RAM (1 of 72-pin, 70-ns Simm)
* Others same as above

Central System # 2 : 486 Multimedia Tower

Intel 486-DX2-66 CPU
CPU Cooling Fan
4MB RAM Memory (1 of 72-pin, 70-ns Simm)
Teac 1.44MB Floppy
Built-in IDE & I/O on board
Baby Tower Case w. 200W Power
Mitsumi or Keytronic 101 Keyboard
Conner or Maxtor 420MB IDE Hard Drive
Oak 087 Super VGA 1MB Card
Standard Technology 14" 1280 x 1024 .28 NI Monitor
Microsoft Serial Mouse
*** Optional Upgrades*

MICRONICS 486-DX2-66 ISA 2VLB	**$1145**
MICRONICS 486-DX2-66 EISA VLB	**$1375**
AIR 486-DX2-66 ISA 3VLB	**$1155**

*** Multimedia Upgrade Options (please add):*
Panasonic 2X + SB 16 + 40W Speakers ($219)
Sony 2X + 16 bit IDE Sound Card + 4W Speakers ($185)

Central System # 3 : 486 Value Station

Intel 486-DX2-66 CPU
CPU Cooling Fan
8MB RAM (1 of 72-pin, 70-ns Simm)
Teac 1.44MB Floppy
Built-in IDE & I/O on board
Mid Tower Case w. 230W Power
Mitsumi or Keytronic 101 Keyboard
Conner or Maxtor 420MB IDE Hard Drive
Kelvin 64 VLB 1MB VGA Card
Viewsonic 15ES or Mitac M1564 15" Monitor
Microsoft Serial Mouse
*** Optional Upgrades*

AMI Super Voyager III 486-DX2-66 2VLB	**$1649**

*** Multimedia Upgrade Options :*
Any 2X or 4X Multimedia Kit available

Central System # 4 : Pentium IDE Station

Intel Pentium 586-90 CPU
CPU Cooling Fan
8MB RAM (2 of 72-pin, 70-ns Simm)
Teac 1.44MB Floppy
Kouwell IDE & I/O (2S 1P 1G)
Mid Tower Case w. 230W Power
Mitsumi or Keytronic 101 Keyboard
Conner or Maxtor 420MB Hard Drive
Kelvin 64 PCI 1MB VGA Card
Viewsonic 15ES 15" or Mitac M1564 15" Monitor
Microsoft Serial Mouse
*** Optional Upgrade*

SUPER P54CT Green 4PCI	**$1979**
MICRONIC 586-90 3PCI , built-in IDE	**$2099**

*** Multimedia Upgrade Option (please add) :*
Teac 4X IDE + SB 16 + Mini Speakers ($265)

Central System # 5 : Pentium SCSI Station

Intel Pentium 586-90 CPU
CPU Cooling Fan
8MB RAM (2 of 72-pin, 70-ns Simm)
Teac 1.44MB Floppy
Built-in IDE & I/O on board
Adaptec 1522A SCSI Board
Mid Tower Case w. 230W Power
Mitsumi or Keytronic 101 Keyboard
Quantum MV-540A 540M SCSI Hard Drive
Kelvin 64 PCI 1MB VGA Card
Viewsonic 15ES 15" or Mitac M1564 15" Monitor
Microsoft Serial Mouse
*** Optional Upgrade*

MICRONIC M54PI 586-90 3PCI	**$2235**
INTEL 586-90 3PCI	**$2199**
SUPER P55CWA PCI (Triton)	**$2199**

*** Multimedia Upgrade Option (please add) :*
Sanyo 4X SCSI + SB 16 SCSI + 40W Speakers ($375)

Central System #6 : Pentium CAD Station

Intel Pentium 586-90 CPU
CPU Cooling Fan
16MB RAM (2 of 72-pin, 70-ns Simm)
Teac 1.44MB Floppy
Built-in IDE & I/O
Mid Tower Case w. 230W Power
Mitsumi or Keytronic 101 Keyboard
Conner or Maxtor 1.2GB IDE Hard Drive
Diamond Stealth 64 2MB DRAM PCI Card
Mag DX15 15" 1280 x 1024 .28 NI Monitor
Microsoft Serial Mouse
*** Optional Upgrades*

AMI Atlas 586-90 4PCI	**$2799**
MICRONICS 586-90 3PCI	**$2775**

*** Multimedia Upgrade Options :*
Any 2X or 4X Multimedia Kit available

For MICROSOFT DOS 6.22 & WINDOWS 3.11, add $79 All systems are upgradable (memory, HD, VGA, monitor, keyboard . . .) for the price difference.

HARDWARE

1. CD DRIVE & SOUND CARD

CREATIVE LABS

CD 531 w. Kit Ext.	*(99)
Digital School House CD Kit Int w. 20 titles.	*(269)
Discovery 16 CD Kit w. 18 titles (new)	275
Edutainment CD 16 Int w. 42 titles	385
Midi Kit + Software	65
Sound Blaster Pro Value Edition	75
Sound Blaster 16 Value Edition oem / reg.	75/95
Sound Blaster 16 IDE	85
SB 16 MCD oem / reg	84/125
SB 16 MCD w. ASP oem / reg	118/165
SB 16 SCSI-2 oem / reg / w. ASP	119/157/179
Sound Blaster AWE 32 VE / w. ASP	225/265
Sound Blaster Multimedia Office Kit	*(499)
Video Blaster MP-400	255
Wave Blaster	189

CHINON

CDS-525 280ms, 300Kb/s, 2X SCSI Int	169

DIAMOND

1000 Multimedia Kit w. 30 titles	319
4000 4 Speed Multimedia Kit w. 11 titles	349
5000 4 Speed Multimedia Kit w. 30 titles	439

MEDIA VISION

MV1100 Deluxe Multimedia Kit 2X Int	229
MV0400SE Premium Portable Ext	299
MV2100 Family Kit / MV3100 Super Kit.	279/339
MV4100 Premium Deluxe Kit	499
Premium 3D 16 SCSI-2 Sound Card	139
Pro 3D 16 SCSI-2 Sound Card	245
Pro 16 Multimedia System II SCSI	*(329)

MITSUMI

FX400 230ms, 600Kb/s, IDE 4 Speed Int	189

NEC

3XP Plus Portable, Triple Speed	389
4XI 220ms, 600Kb/s, 4 Speed Int	379
4XE 220ms, 600Kb/s, 4 Speed Ext	479

PLEXTOR

PX-43CH 220ms, 600Kb/s, 4 Speed Int	389
PX-63CS 145ms, 900Kb/s, 6 Speed Int	535

SANYO (Concord)

CDR-H93MV 66ms, 600Kb/s, 4X SCSI-2	229

SONY

CDU-55E Double Speed IDE	119
- w. IDE Sound Card & Speakers	185
CDU-55S Double Speed SCSI	189

TEAC

CD55A 195ms, 4X IDE, Int / w. Kit	179/249

TOSHIBA

3601B 150ms, 600Kb/s, 4 Speed Int	289
Crystalake : 4X Toshiba 5302 w. Kit + 3CD	215

TURTLE BEACH

Monte Carlo Game Card	95
Monterey Multisound	329
Tropez Sound Card	225

OTHERS

16 bit IDE Sound Card	59
Adaptec Audio Edge	199
CD Caddy / Sony CD Caddy	3.99/4.99
CD Jewel Case	0.99
CD Pop-Out Storage Case (holds 30 CDs)	19.99
Gravis Ultrasound / Max 32 Voice	*(119)/175
JVC CD Writer (w. Adaptec, cable, software)	
- 2 Speed Int / Ext	1975/2050
- 4 Speed Ext	4165
Panasonic CR-562 + SB16 + Speakers	199
SIIG Play Computer Games On TV	149
Wav Jammer 16 bit Stereo PCMCIA	275
Speakers :	
Active 75 (80W) / Active SP-690	49/35
Altec ACS50 / ACS150 / ACS300.1	67/95/225
EP-88 (80W) / EP-120 (120W)	42/65
EP-280 (40W) / Mini Speakers (4W).	29/7.99

2. CASE

Baby AT w. 200W Power	59
Baby Tower w. 200W Power	59
Mid Tower w. 230W Power	75
Mid Tower w. Side Door Open, 230W Power	79
Mid Tower w. 250W Power : Black / White	139/129
Full Tower w. 250W Power	119
Full Tower w. 300W Power : Black / White	199/189
Slim w. 130W Power (2 drive bay)	75
Hard Disk Drive External Casing	
- 2 half ht or 1 full ht for PC, 60W	95
- 2 half ht or 1 full ht for Mac, 60W, w. cables	115
Antec CD Rom or 5.25" External Casing	65
Antec 3.5" HD External Casing	59

*(price) . . . . special, while supplies last

oem . . . . $ bundled with hareware only

CENTRAL
COMPUTER SYSTEMS INC.
WIDE SELECTION AT LOW PRICES

Grand Opening Soon : TEL : 415 495-5888
835 - 837 Howard Street, San Francisco CA 94103

3. CONTROLLER

ADAPTEC

1515 16 bit Controller w. Kit	89
1522A Fast SCSI Board, 3Mb/s / w. Kit	85/145
1542CF SCSI Board, 10Mb/s / w. Kit	175/239
2742AT SCSI EISA w. Kit	365
2842AK SCSI VLB w. Kit	239
2940 SCSI PCI w. Kit oem / reg	239/289
2940W Wide-SCSI PCI Kit w. wide int cable	299
APA1460 Slim PCMCIA SCSI	249
ASW-EZ SCSI 3.1 for Dos & Windows	69
T348K Parallel to SCSI Adapter	129
T358K EPP Parallel to SCSI Adapter	179

BUSLOGIC

KT410A IDE Cache VLB	129
KT445C SCSI VLB w. Kit	199
KT542B SCSI-2 w. Kit	209
KT747C Fast SCSI-2 EISA w. Kit	365
KT910A IDE Cache PCI w. Kit.	179
KT946C SCSI PCI w. Kit (supports 8GB HD)	269

COREL

Corel SCSI Software v2.0	85

DTC

2278VL IDE w. I/O VLB, 32 bit	35

FUTURE DOMAIN (SCSI)

TMC-1660 for AT (HD only)	119
TMC-1660 SVP (SCSI Value Pack)	127
TMC-1680 for AT (4FD & HD) / SVP	129/139
TMC-3260 PCI / SVP	129/165

KOUWELL

IDE only / PCI IDE Controller	24/33
IDE w. AT I/O (2S 1P 1G)	27
IDE w. AT I/O (2S 1P 1G) & 16550 & 2.88	49
IDE w. AT I/O (2S 1P 1G) VLB & 16550 chips	59
Enhanced IDE/ 4HD/ FD/ 2S 1P/ VLB	35

NEW MEDIA

PCMCIA Bustoaster SCSI	215
PCMCIA Bustoaster SCSI-2	219

PROMISE (drive cache)

DC-4030VL IDE VLB, cache up to 16MB	105
DC-5030 IDE PCI	129
EIDE 2300 Plus IDE/ 4HD/ 2S 1P/ 16550	59

QLOGIC

Fast SCSI 16 bit (all SCSI CD Rom)	65
Fast SCSI EISA w. Kit	199
Fast SCSI VLB w. Kit	189
Fast SCSI PCMCIA	199
Fast SCSI PCI w. Kit	249
Wide SCSI PCI w. Kit	299

VITEX

IDE w. 4FD/ 2S 1P/ 16550 chips	45
IDE w. 4FD/ 4S 2P 1G/ 2S16550/ VLB	89
Enhanced IDE/ 4HD/ 2FD/ 2S 1P 1G/ VLB	35
Enhanced IDE/ 4HD/ 2S 1P/ VLB/ 16550	55

WONDER SYSTEM

IDE w. 4FD/ 2.88/ Drivers Tape/ 1.0 Mbps	35
IDE 2HD/ 4FD / 2S 1P / 16550	45
IFSP2 IDE w. 4FD/ 3S 2P 1G/ 2S16550	69
SCSI w. CD Rom Drivers 16 bit.	49
VL3208 EIDE w. 4HD/ 2FD/ 16550/ VLB	55

OTHERS

ACCULOGIC IDE PCI Controller	49
ASUS SC200 SCSI-2 PCI (w. NCR chips)	85
BOCA IDE w. I/O (2S 1P)	49
IDE w. I/O (2S 1P) / IDE w. I/O VLB	19.50/29

4. CPU & MATH CO

CPU :

AMD

386 DX-40	59
486-DX2-66 / DX2-80	159/169
486-DX4-100	209

CYRIX

486 DX-33	119

INTEL

386 DX-33 / DX-40	45/45
486 DX-33 / DX-50	139/269
486 DX2-50 / DX2-66	169/179
486 DX4-100	269
Pentium 586-60 / 66	379/499
Pentium 586-90 / 100	559/735

Math Co Processor :

CYRIX

83D87 - 33	35

INTEL

387 DX (for 16/ 20/ 25/ 33 MHz)	85
387 SX (for 16/ 20/ 25/ 33 MHz)	79

ULSI

83D87 - 40	35

OTHERS

Cooling Fan for 486 CPU	6.95
Cooling Fan for Pentium 586	15

5. DIGITIZER

SUMMASKETCH

III 12 x 12, 4 or 16 button	*(249)269
III 12 x 18, 4 or 16 button	549

WACOM

UD-0608R 6 x 8, w. UP-201 Pressure Stylus	345
UD-1212RP 12 x 12, w. UP-201 Pres. Stylus	529
KT-0405R 4 x 5, Art Pad	155
KT-0405R with Fractal Dabler	185

6. DRIVE

SYQUEST (MITAC, removable)

105MB 3.5" w. cart., IDE host adapter	279
105MB 3.5" w. cart., printer port for PC, Ext.	369
105MB 3.5" w. cart., SCSI for Mac, Ext.	389
200MB 3.5" w. cart., SCSI Ext	499
270MB 3.5" w. cartridge, IDE, Int	465
270MB 3.5" w. cartridge, SCSI, Ext.	499
270MB 3.5" w. cart., printer port for PC, Ext.	499
105MB Cartridge / 270MB Cartridge	59/69
Syquest 270MB 3.5" w. cart., IDE Int	489
Syquest 270MB 3.5" w. cart., SCSI Ext	539

FLOPPY DRIVES :

TEAC

1.2MB 5.25"	46
1.44MB 3.5" / w. frame	36/40
Dual - 1.2MB & 1.44MB	89

HARD DRIVES :

CONNER

CFS-270A 14ms IDE	155
CFS-425A 420MB 14ms IDE 1" ht	169
CFS-540A 540MB 14ms 32k IDE 1" ht	189
CFA-850A 850MB 12ms 256k IDE 1" ht	279
CFP-1080S 1.08GB 11ms 256k SCSI-2	485
CFA-1275A 1.2GB 12ms 256k IDE 1" ht.	425
CFP-2105S 2.1GB 10ms 1/2 ht	965

FUJITSU (2 yr. warranty)

M2684TAU 540MB 12ms IDE 1" ht	195
M2684SAU 540MB 12ms SCSI 1" ht	215

MAXTOR

MXT-7270AV 270MB 12ms 32k IDE	159
MXT-7425AV 420MB 12ms 32k IDE	169
MXT-7540AV 540MB 14ms 64k IDE	195
MXT-7546A 546MB 12ms 256k IDE	195
MXT-71260A 1.2GB 12ms 256k IDE	415
Optical Rewritable 1.3GB 19ms SCSI, 4MB Ext.	
Tahiti III MXO-9410000 Drive only	2175
1GB Glass Cart. MXO-2015382 512k sector	165
1GB Plastic Cart. MXO-2015383 512k sector	135

MICROPOLIS

MC-4221 2.1GB 8.5ms 512k 1" ht	1045
MC-1936 3.0GB 11ms 256k SCSI full ht	1455
MC-1936AV 3.0GB Audio Visual	1495
MC-3243 4GB 8.5ms 512k 3.5" ht	1995

NEW MEDIA

PCMCIA 105MB IDE	419
PCMCIA 170MB IDE	489
PCMCIA 260MB IDE	589

QUANTUM

LPS-270S 270MB 12ms 128k SCSI	175
LT-540A 540MB 11ms 128k IDE	205
LT-540S 540MB 11ms 128k SCSI-2	225
MV-540A 540MB 14ms 128k IDE	189
MV-540S 540MB 14ms 128k SCSI	209
LT-730A 730MB 11ms 128k IDE	249
LT-730S 730MB 11ms 128k SCSI	279
EM-1080S 1.08GB 9.5ms SCSI-2	559
XP-32150 2GB 8ms 1MB SCSI-2	895

SEAGATE

ST3491A 420MB 14ms 128k IDE	169
ST-3660A 540MB 14ms 128k IDE 1"ht.	195
ST-3780A 720MB 12ms 256k IDE	255
ST-31220A 1.08GB 12ms 256k IDE	399
ST-31230N 1.05GB 9ms 512k SCSI-2	559
ST-32430N 2.14GB 9ms 512k Fast SCSI	975
ST-32550N 2.14GB 8ms 512k SCSI-2	1045
ST-12550W 2.14GB Fast-wide SCSI	1265
ST-43400N 2.9GB 10ms 512k SCSI-2	1895
ST-15230N 4.3GB 9ms 512k SCSI	1895
ST-410800N 9.0GB 11.5ms 1M SCSI	3665

WESTERN DIGITAL (3 yr. warranty)

WD-2420 420MB 13ms 128k IDE	185
WD-2540 540MB 12ms 128k IDE	239
WD-2850 850MB 10ms 128k IDE	279
WD-31000 1.0GB 10ms 128k IDE	389

OTHERS

Impression CardDrive (2 slot PCMCIA)	185
Mounting Frame for 3.5" Hard / Floppy Drive	5/5
Removable Case for 3.5" HD IDE / SCSI	39/42

7. I/O CARD

KOUWELL

AT I/O (2S 1P) / AT I/O (2S 2P)	25/29
AT I/O (2S 1P 1G) / w. 16550 chips	25/42
Printer Card	15
Serial Card (XT, AT)	15

QUICKPATH

13 Port I/O w. 4-16550UARTs + Extd. IRQs (2IDE, 4F, 4S, 2P, 1G)	125
4 Serial, 16550UARTs, 8addr, 10IRQs (3,4,5,7,9,10,11,12,14,15)	99

SIIG (5 yr. warranty)

(2S 1P) w. 16550 chips	45

STB 4-COM

4 Serial, 16 bit, 16550, support Com 1-8, IRQ (2,3,4,5,10,11,12,15)	109

VITEX

AT I/O (2S 2P) w. 16550 chips	45

8. KEYBOARD

FOCUS

FK2001 101 Click	42
FK9000 129 Key Programmable	53

MICROSOFT

Natural Keyboard	95

NORTHGATE OMNI (5 yr. warranty)

101NI / 102	*(65)/*(65)
Ultra T / Ultra F	*(89)95

SIIG (5 yr. warranty)

Minitouch	45
Supertouch 101 Click	53
Wavetouch 101 Soft	39

OTHERS

Ancer 101 Key (black)	42
BTC 84 Key Mini	35
Keytronic 101	35
Maxi 101 / Maxi 124	35/53
Mitsumi 101	29
Spill -resistant 101 Key	19.50
Unikey Natural Ergonomic Keyboard	45

9. MEMORY

DRAM

256k x 4 - 80ns	5.50

SIMM

1 x 9 - 60ns / 70ns / 80ns	(1MB)	41/40/39
4 x 9 - 60ns / 70ns	(4MB)	155/149
16 x 9 - 70ns	(16MB)	579
256k x 9 - 70ns		12
1 x 36 - 60ns / 70ns	(4MB , 72 pin)	175/165
2 x 36 - 60ns / 70ns	(8MB , 72 pin)	345/335
4 x 36 - 60ns / 70ns	(16MB, 72 pin)	559/549
8 x 36 - 60ns	(32MB, 72 pin)	1079

SIPP

1MB x 9 - 70ns (3 chips)	42

COMPUTER MEMORY (3rd party)

details and prices	*call*

KINGSTON MEMORY

details and prices	*call*

LAPTOP / NOTEBOOK (3rd party)

details and prices	*call*

LASER PRINTER MEM. UPGRADE

details and prices	*call*

10. MODEM & FAX

BOCA

14.4 Fax Int / Ext	*(89)/119
14.4 Pocket Fax	169
28.8 Fax Modem v.34 Int / Ext	*(165/199)

COMPUTER PERIPHERAL

14.4 Fax Modem Voice	89

GVC (Maxtech)

14.4 Fax Int / Ext	65/89
14.4 Fax Modem Voice Int	74
PCMCIA 9624 Fax	99

HAYES

Accura 144 + Fax Int / Ext	*(99/129)
Accura 28.8/14.4 v.34 Modem Ext	229
ESP Communication : Single / Dual port.	85/125
Optima 288 V.Fast 144 Fax Ext	415
Optima 288 v.34 Ext	445

MEGAHERTZ

PCMCIA XJ1144 Fax (MNP5)	185
PCMCIA XJ2144 Fax (MNP10)	219
PCMCIA CC3288 Fax	365

MICROCOM

Deskporte 28.8S V.34 Fax Ext	189
Deskporte EP 28.8 Fast 14.4 Fax Ext	249

PRACTICAL PERIPHERALS

Mini Tower 144FX144 Ext	119
PM144FX144 Int	99
288 Fax v.34 Int / Ext	209/225

SHIVA

Net modem/E Ethernet BNC/TP	1475

US ROBOTICS

Courier V.34 28.8/14.4 Fax Int / Ext	395/425
Sportster 144/144 Fax MNP5 Int / Ext	99/119
Sportster 144/144 for Mac Ext	149
Sportster V.34 28.8/14.4 Fax Int / Ext	219/235
Sportster V.34 28.8/14.4 Fax for MAC	259
Sportster PCMCIA 144 Fax	185

ZOOM (7 yr. warranty)

144/144 Fax Modem & Voice Int / Ext	139/169
28.8 V.Fast 14.4 Fax Int / Ext	139/189
28.8 V.34 14.4 Fax Int / Ext	189/199

ZY-XEL

U1496B 16.8 Voice 14.4 Fax w. Software Int	289
U1496B+ upgradable to 19.2Kbps Int	397
U1496E 16.8 Voice 14.4 Fax, LED Ext	299
U1496E+ upgradable to 19.2Kbps Ext	399

OTHERS

CommShare 550 Phone & Fax auto-switch	75
CommShare 750 4 Port Switching	99
Intel Plus/OCR 2.0	*(45)
National Semiconductor TyIN 2000 Int	*(75)
SIIG TeleCommunicator 10-in-1 Fax	219
14.4 Fax modem Int	59

11. MONITOR

ACER VIEW

AV34T 14" 1024 x 768 .28 NI	239
AV56L 15" Flat 1280 x 1024 .28 NI	349
AV76i 17" Flat 1280 x 1024 .27 NI	629

EYE Q

SM1411 14" Flat Mono Amber Paper White	85
M447AU 14" 1024 x 768 .28 NI	249

HITACHI

CM1586MU 15" Flat 1280 x 1024 .28 NI	369
CM1797M 17" Flat 1600 x 1200 66Hz .26 NI	975
NS1764 17" Flat 1280 x 1024 60Hz .26 NI	699

KFC

CT1428A 14" 1024 x 768 .28 NI	249
CA1507 15" Flat 1280 x 1024 .28 NI LED.	375
CA1508 15" Flat 1280 x 1024 .28 NI LCD	389
CA1718 17" Flat 1280 x 1024 .26	745

LIYAMA (IDEK)

MF-8115 15" 1280 x 1024 .28	415
MF-8617A 17" 1280 x 1024 .26 NI	769
MF-8621 21" 1600 x 1200 .26	2235
MT-9121 21" 1600 x 1200 .30	1895

MAG (auto switch power)

DX15F 15" 1280 x 1024 .28 NI (no LED)	369
DX17F 17" 1280 x 1024 .26 NI (no LED)	669
MXP17F 17" Flat 1600 x 1280 .26 NI	915

MITAC (3 yr. warranty)

M1564 15" 1280 x 1024 .28 NI	325
M1775 17" 1280 x 1024 .28 NI	599

NANAO

F340iW 15" Flat 1024 x 768 .28 NI	599
F550iW 17" 1280 x 1024 .28 NI	*(849)979
F2.17EX 17" 1600 x 1200 .26 NI	959
T2.17 17" 1280 x 1024 .25 NI	1285
T2.20 20" 1600 x 1280 .30 NI	1955
F780iW 21" 1600 x 1280 .26 NI	2995

NEC

2V 14" 1024 x 768 .28	329
4FGe 15" Flat 1024 x 768 .28 NI	*(599)
XP15 15" 1024 x 768 .28 NI	655
XV15 15" 1024 x 768 .28	439
XE17 17" 1024 x 768 .28 NI	985
XP17 17" 1280 x 1024 .28 NI	1249
6FGp 21" 1280 x 1024 NI	1995
XE21 21" 1280 x 1024 .28 NI	1995
XP21 21" 1600 x 1200 .28 NI	2449

NOKIA

449E 15" 1280 x 1024 .28 NI	*(425)499
447L 17" 1024 x 768 .28 NI	749
447X 17" 1600 x 1280 .25 NI	1049
447X 17" 1600 x 1280 .25 NI TCO	1175
445X 21" 1600 x 1280 .26 TCO	2485

OPTIQUEST

1000S 14" 1024 x 768 .28 NI	249
1500D 14" 1280 x 1024 .28 NI	349
2000DC 15" 1280 x 1024 .27 NI	399
4000DS 17" 1280 x 1024 .27 NI	629
4000TC 17" 1280 x 1024 .25 Trinitron NI	799

PANASONIC

C1791E 17" 1280 x 1024 .28 NI	739

PROTON

GM1449A 14" 1024 x 768 .28 NI	245
GM1563 15" 1280 x 1024 .28 NI	345
GM1563B 15" 1280 x 1024 Black	359
PM1561A 15" 1280 x 1024 w. speakers built-in	345

SONY

1425 14" 1024 x 768 .25	335
15SF 15" 1280 x 1024 .25 NI	439

17SE 17" 1600 x 1280 .25 NI w. After Dark	989
17SF 17" 1280 x 1024 .25	869
20SE 20" 1280 x 1024 .30 NI	1835

STANDARD TECHNOLOGIES

428-VESA 14" 1280 x 1024 .28 NI	249

TATUNG

20" Analog 1280 x 1024 .31	755

VIEWMAGIC

10" SVGA Mono Paper White 1024 x 768	129

VIEWSONIC

6E 14" 1024 x 768 .28 NI	275
15 15" Flat 1280 x 1024 .28 NI	429
15ES 15" 1024 x 768 .28 NI, MacII	345
17 17" 1600 x 1280 .27 NI, MacII	849
17G 17" 1280 x 1024 .28 NI	749
17GS 17" 1280 x 1024 .27 NI	789
20PS 20" 1600 x 1280 .28 NI, MacII	1449
21PS 21" 1600 x 1280 .26 NI, MacII	1669

12. MOTHERBOARD

AIR (w/o cpu)

486-DX2-66 256k, 3VLB slots, built-in AT I/O	189
486-33 / DX2-66 256k, EISA, 3VLB slots	349
586-90 256k, EISA, Adaptec SCSI, Floppy, w. I/O built-in	659
586-90 256k, EISA, Adaptec SCSI, Floppy, dual processor, w. I/O built-in	769
586-90 256k, ISA PCI VLB, w. I/O built-in	379

AMI (w/o cpu)

Super Voyager III 486-DX2-66 VLB, 7 slots	329
Enterprise IV 486-DX2-66 256k EISA VLB	445
Atlas 586-90MHz PCI 256k w. IDE I/O	435
Titan II 586-90 256k EISA, dual processor	985

ASUS (w/o cpu)

486-DX2-66 256k VLB	139
486-DX2-66 256k PCI, built-in IDE+SCSI I/O	275
P54TP4 586-90 256k PCI (Triton)	359
586-90 / 100 256k PCI EISA, dual processor	779

IBM (OPAL)

486SLC-66 VLB w. CPU & Math Proc	165

INTEL (w/o cpu)

586-90MHz 256k PCI, built-in IDE I/O	359
586-100Mhz 256k PCI, built-in IDE I/O	385

LYNX (USA made, w/o cpu)

486-33 / DX2-66 256k VLB Green PC	135
486-DX4-100 256k PCI/ VLB	159

MICRONICS (w/o cpu)

BCP 386-33 64k, 4MB max	79
486-33 / DX2-66 256k VLB	179
JX3WB 486-DX2-66 256k VLB w. write-back cache	259
486-33 / DX2-66 256k EISA VLB	415
M5PE 586-60 / 66 256k EISA	515
M54PI 586-90 w. IDE I/O (Neptune)	415

NICE (w/o cpu)

486-33 / DX2-66 256k VLB, Green PC	135

SHUTTLE (w/o cpu)

486-DX2-66 256k 3VLB slots, Green PC	135
486-DX2-66 256k EISA 3VLB slots	239

SUPER (w/o cpu)

P54CT 586-90 / 100 256k PCI VLB	279
P54CI 586-90 / 100 256k PCI, built-in IDE	279
P55CWA 586-90 / 100 256k PCI (Triton)	379

TIGER V

586-90MHz 256k PCI	279

13. MOUSE & JOYSTICK

AGILER

AGM-800E Serial 400 dpi	12.50
ATB-610 Serial Trackball	21.50
Master Plus 400	16.50

ANCER (black)

3-button	19

KENSINGTON

Expert Bus 4.0	115
Expert Serial & Trackball 4.0	95
Thinking Mouse (serial & PS/2)	79

LOGITECH

Cordless II	85
First Serial	31
Fotoman Plus Camera for PC & PS/2	549
Mouseman Bus	64
Mouseman Serial	45
PG15 Bus oem	45
Trackman II	75
Trackman Portable	49
Wingman Standard / Extreme	29.95/47

MICROSOFT (USA made)

Bus 2.0 400dpi oem / w. Bus Card	43/65
Bus 2.0 w. Expansion Card	79
Home Serial 1.0	39.95
PS/2 2.0 (round connector)	59
PS/2 & Serial Mouse / w. adapter	41/45
Serial 2.0 400dpi oem : gray / white	29/35

MOUSE SYSTEMS

Altes Mouse	9.95
Cobra (joystick)	9.95
Mouse! Serial w. Pad	19
PC Mouse (3-button optical)	39.50
PC Trackball II	45
ProAgio (5-button serial)	48
Serial Bus Card (9IRQs)	29

JOYSTICK :

THRUSTMASTER

ACM Gamecard	29.95
F-16 FLCS	135
Flight Control System MK II	75
Flight Control System Pro	119
Formula T1 / w. Indy Car	125/139
Rudder Control	118
Weapon Control MKII	109
UPROM	29.95
XL Action	35

OTHERS

Analog Plus (by Sun Comm)	*(19.99)
Dexxa Serial Mouse	19.50
Gravis Analog Pro	29
Gravis PC Gamepad	19.95
Quickshot Smart Game Card	16.50
Mickey Mouse Pad	4.99
Star Trek Mouse Pad	7.99

14. NETWORK

3COM

3C503 Etherlink II 16 bit coax / TP	165/175
3C509 Etherlink III coax oem / reg	89/118
- 5 Pack oem / reg	445/529
3C509 Etherlink III TP+AUI oem / reg.	*(75)/115
- 5 Pack oem / reg	*(365)/499
3C509 Etherlink III Combo oem / reg	99/129
- 5 Pack oem / reg	*(465)/559
3C509 Etherlink III TPO / 5 pack	*(65)/*(325)449
3C529 Etherlink III for MCA coax / TP	235/239
3C579 Etherlink III EISA coax / TP	228/229
3C589 PCMCIA TP / Combo	169/215
3C590 PCI TPO / Combo	155/179
3C595-TX PCI 10/100 TP	234
3C16170 Link Builder (12TP)	345
Transcend Link Builder FMS Management	350

ADDTRON

HUB: UTP8/L (8TP +BNC + AUI)	149
HUB: UTP16/L (16TP + BNC + AUI)	285
HUB: UTP16 (16TP+BNC+AUI) RackMount	399
Pocket Adapter BNC	115
Transceivers: ET10TB (TP<->AUI)	37
Transceivers: ET10CB (BNC<->AUI)	37

ALLIED TELESIS (CentreCOM)

Transceivers: MX10 (AUI - BNC)	39
Transceivers: 210T (AUI - TP)	39

ARTISOFT (Lantastic)

Articom	*(99)
Central Station Netware	349
Central Station II	399
Corstream Server 5-user (8340)	*(499)
HUB: 8 Port (8TP + BNC)	189
HUB: 12 Port (12TP + BNC)	225
Lantastic Z (2 stations)	89
Lantastic 6.0 Starter Kit coax 2-user	*(235)
Lantastic 6.0 Add On NR-SI 2000C	*(115) ea.
*- or ** Buy 2 Get 1 Free ** or ** 3 for $230 ***	
Lantastic 6.0 Add On NR-SI 2000T	125
Lantastic 6.0 Software single user	75
- 6.0 for 5-user / 10-user	339/599
- upgrade for single / for 5-user	39/*(99)
Lantastic for OS/2	99
Lantastic for TCP/IP single / 5-user	199/785
NR-SI 2000C coax / 5 pk / 10 pk	79/375/685
NR-SI 2000T TP / 5 pk / 10 pk	84/379/689
NR-SI 2000A Combo	99
Remote Boot ROM for NR2000	45

ASANTE (for Mac & PC)

10T HUB 8 Port (8TP + 1BNC)	189
10T HUB 12 Port (12TP + 1BNC + 1AUI)	369
FriendlyNet with AUI / BNC / TP	69

BOCA

HUB: 8 Port TP only	139
HUB: 16 Port TP only	269
LAN Card : ISA TP / ISA Combo	59/69
LAN Card : VLB TP	75
PCI 32 bit Ethernet Combo	89
PCMCIA 10BT Ethernet	169

CASTELLE

JetPress (network Print server) for HP II. IID, III, IIID, coax + TP	429
LANPress (print server connects up to 4 printers)	
- Ethernet Thick/Thin coax (1P 3S)	475
- Ethernet 10BaseT (1P 3S)	475
- Ethernet BNC & 10BaseT (2S 2P)	435

CNet (Advanced Network)

200E+ coax / 600E+ TP	39/35
650E+ Jumperless Combo	45
3270 Emulation for PC / for PS/2	175/195
4020ERP 2 Port Repeater coax	199
5250 Emulation for PC / for PS/2	199/235
8000TPC HUB: 12 Port Stackable	299
8800TPC HUB: (8TP + BNC)	135
8816TPC HUB: (16TP + BNC)	255
8900TPC 12 Port SMNP Slave HUB	465
8910TPC 12 Port SMNP Master HUB	775

COGENT

EM100 PCI Fast-TX, 32 bit bus mastering	229
EM400 PCI Quarlet Fast (4UTP)	1095
EM525 Ethernet 16 Combo	85
EM595TP Ethernet PCMCIA UTP	199
EM932 EISA 32 bit coax / TP	238/239
EM960 32 PCI Full Duplex TP / Combo	135/159
EM964TP 32 PCI 4-Port Full Duplex TP	495

DANPEX

ArcNet Products	call
1616I SNMP Intelligent 16port Hub	625
1616M SNMP Manageable 16port Hub	395
6200P2 PCMCIA BNC+TP	115
7000P3 32bit VLB Combo	79
9400P3 32bit PCI Combo	85
ET-510 UTP to AUI Translator	107
ET-590 UTP to BNC Translator	109
PrintMate PM-NW (for Netware)	269
PrintMate PM-TCP (for SUN, UNIX)	279
Token Ring Products	call

HP (Hewlett Packard)

Advanced Stack 12 Port HUB	599
- with SMNP	895
Advanced Stack 24 Port HUB	999
- with SMNP	1329
Jet Direct J2550A TP	329
Jet Direct J2552A Combo	395

IBM

Ether 16 coax / TP / Combo	69/69/79

INTEL

EtherExpress 32 EISA coax (FS)	439
EtherExpress 32 Flash EISA Combo (WS)	229
EtherExpress PRO/100 PILA 8465 PCI TP	*(195)
EtherExpress Pro 8/16 bit cards :	
- PCLA 8200 BNC + AUI + TP	129
- PCLA 8200 5 pack	559
- PCLA 8210 BNC + TP oem / reg	88/115
- PCLA 8210 5 pack	499
- PCLA 8220 TP oem / reg	74/109
- PCLA 8220 5 pack	469
- PCLA 8205 Flash BNC+AUI+TP	139
- PCLA 8205 5 pack	599
- PCLA 8215 Flash BNC + TP / 5 pk	125/549
- PCLA 8225 Flash TP / 5 pk	119/499
LAN Project 1.5 (virus protection)	685
LAN Sight Support 4.0	345
LAN Spool s/w 386 NLM v3.5A	425
Netport II Thin & Thick	395
Netport II 10BT	399
Netport Express XL	465
NetSatisfaxtion 2.5 for Novell	955

LANPRO

2000JC 16 bit BNC only	39
2000JT 16 bit TP	35
2000RAL 16 bit Combo	45
EP3010A Pocket Combo	115
HUB ER5390: 8 Port	149
HUB ER5396: 16 Port (17TP + BNC + AUI)	265
Personal Netware coax 1 user Kit	79
Personal Netware coax Starter Kit	139

MICRODYNE

Eagle NE200 PCMCIA coax / TP	235/189
Eagle NE3210 EISA 32 bit Combo	189
NE2000+ coax / 5 pack	*(79/349)
NE2000+ TP / 5 pack	*(69/319)
NE2000+ Combo / 5 pack	*(85/389)
NE3200 EISA coax / TP	450/450
Synchronous .35 WAN Adapter	869

NATIONAL SEMICONDUCTOR

InfoMover NE2000+ coax / 5 pack	*(75)/339
InfoMover NE2000+ TP / 5 pack	*(69)/299
InfoMover NE2000+ Combo / 5 pack	*(89)/415
InfoMover NE4100 PCMCIA coax / TP	175/179

NOVELL

Dos 7 (w. Personal Netware) oem / reg.	45/55
Lan Workplace 4.2 single / 10-user	275/1295
Netware 3.12	
- 5 / 10 / 25-user oem	525/1155/1825
- 5 / 10 / 25-user reg	*(595/1375/2095)
Netware 4.1	
- 5 / 10 / 25-user oem	560/1195/1895
- 5 / 10 / 25-user reg	695/1495/2195
- 50 / 100 / 250-user	3195/4395/7495
Netware NFS v1.2C	3150
NFS Client for Lan Workplace	205
Personal Netware oem / reg	39/75
Unixware Personal Edition - CD version	175
Unixware SDK v1.1 - CD version	75
Unixware NFS	135

PALINDROME

Network Archivist NLM 3.1A	*(995)

SMC

8013 Plus Elite 16 coax / 6 pack	118/625
8013 Plus Elite 16 TP / 6 pack	*(99)/599
8013 Plus Elite 16 Combo / 6 pack	139/775
Elite Ultra 16 coax / 6-Pack	109/449
Elite Ultra 16 TP / 6-Pack	108/399
Elite Ultra 16 Combo / 6-Pack	119/499
Elite Ultra 32 EISA Combo	215
Ether EZ coax / TP / Combo	115/*(99)/*(115)
Etherpower PCI : TP / Combo	185/199
Etherpower PCI 10/100	219
Netware Boot ROM for Ethernet v1.3	29.50
Tiger HUB: 3206TA 6 Port	185
Tiger HUB: 3212TC (12TP + BNC + AUI)	369

XIRCOM

PCMCIA CE2-10BT TP	*(199)
PCMCIA CE2-10BC Combo	*(235)
PE3-10B2 Pocket Adapter coax	*(255)
PE3-10BT Pocket Adapter TP	*(259)
PE-3 10BC Pocket Adapter Combo	*(269)

CABLES & ACCESSORIES	***call***

15. NOTEBOOK

TOSHIBA

T1960CS 486-DX2-50, 4MB RAM, 200MB HD, 1.44BM FD, Dual Scan Color	2275
T1960CT 486-DX2-50, 4MB RAM, 200MB HD, 1.44MB FD, Active Color	2795
T1960CT 486-DX2-50, 4MB RAM, 320MB HD, 1.44MB FD, Active Color	3029
T3600CT 486-DX2-50 8MB RAM, 250MB HD, 1.44MB FD, Acitve Color	3699
T4700CT 486-DX2-50, 8MB RAM, 200MB HD, 1.44MB FD, Active Color	4399
T4700CT 486-DX2-50, 8MB RAM, 320MB HD, 1.44MB FD, Active Color	4629

OTHERS

9200 9.5/10.4" Viewable Screen size, 128k, 4MB (expandable to 36), VLB w.1MB video ram, removable HD, built-in speaker & microphone :

- 486-DX2-66, 340MB (DSTN)	1885
- 486-DX2-66, 340MB (TFT)	2495
- 486-DX4-100, 340MB (DSTN)	2025
- 486-DX4-100, 340MB (TFT)	2695

16. POWER SUPPLY

AMERICAN POWER CONVERSION

APC-400 Smart-UPS (286, 386 WS)	289
APC-600 Smart-UPS (386, 486 FS)	359
APC-900 Smart-UPS (386, 486, FS & WS)	515
APC-1250 Smart-UPS (multiple FS & WS)	639
APC-2000-2 Smart-UPS	1150
APC-280 Back-UPS (200W)	108
APC-400 Back-UPS (300W)	165
APC-450 Back-UPS (325W)	199
APC-600 Back-UPS (425W)	269
APC-900 Back-UPS (650W)	375
Back-UPS Pro APC-280	155
Back-UPS Pro APC-420	225
Back-UPS Pro APC-650	295
PowerChute Plus :	
- for Novell	65
- for OS/2, Lan Server, 3 Com	75
- for Unix / Xenix	99
- for Windows NT	69

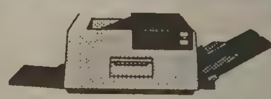
PC POWER COOLING

Standard 220	
- for Desktop / Full Tower	85/85
Silencer 270	
- for Slim (baby or mid tower)	135
- for Desktop / Full Tower	164/159
Turbo Cool 300	
- for Slim (baby or mid tower)	139
- for Desktop / Full Tower	169/165
Turbo Cool 450	
- for Desktop / Full Tower	299/295
Twinpower 900 (redundant)	925

TRIPP LITE

Isobar / Isotel	call

17. PRINTER / PLOTTER



BROTHER

HJ-400 Desktop Ink Jet for PC or Mac	*(249)259
HL-630 Laser 6ppm	399
HL-641 6ppm, 1MB RAM	449
HL-645	459
HL655M for PC & MAC, 2MB RAM	599

CANON

BJ-200EX Ink Jet	229
BJC-600E Ink Jet, Color, Par. 780dpi	479
BJC-4000 Ink Jet, Color, 360dpi	359

CITIZEN

GSX-220 24 pin	179
GSX-230 Fonts & Quiet	219
GSX-240 Scalable Fonts & Quiet	285
GSX-345 24 pin, 132 column	365
Projet II Ink Jet	269

DEC (Digital Equipment)

DecLaser 5100 w. 6MB	1125
DecWriter 500i / color upgrade	299/46

EPSON

Stylus Color Inkjet 720dpi	*(525)

HP (Hewlett Packard w. toner)

Color Laser Jet	5495
Desk Jet 540	289
Desk Jet 660C	*(499)
Desk Jet 1200C PC, Mac	999
Desk Jet 1200C Postscript PC, Mac	1595
Laser Jet 4+ / 4M+	1399/1899
Laser Jet 4L / 4ML	529/985
Laser Jet 5P / 5MP	969/1385
Laser Jet 4Si / 4SiMX	2875/3995
Laser Jet 4V / 4MV	1895/2695
Office Jet (printer-fax-copier) 3-in-1	759
Accessories :	
- Color Kit for 540	49
- Duplex C2061A for 4Si or 4SiMX	495
- Envelope Power Feeder 75 Sheet (HP4)	279
- Legal, Letter or A4 250 Sheet Tray (HP4)	99
- Legal, Letter or A4 500 Sheet Tray (HP4)	109
- Lower Cassette w. Letter Tray (IIP, IIIP)	149
- Optional 500 Sheet legal Letter A4 (HP4)	279
- Postscript for LJ4	329
- Postscript C2013A for 4Si	575
- Toner for II, III	84
- Toner for IIP, IIP+, IIIP	76
- Toner for 4 / 4L or 4P	109/69
- Toner for 4Si / 4V	135/149

LASER MASTER

Winjet 1200 (postscript for HP4)	*(549)
Winjet 1200+ (postscript for HP4+)	*(599)

MICROTEK

TrueLaser MTP-306 35 fonts, 6ppm, 2MB	*(745)

OKIDATA

ML184T 9 pin, Par	229
ML320 9 pin, Epson compatible	325
ML380 24 pin, Epson compatible	235
ML590 24-wire	429
OL400E Laser	*(425)
OL410E Laser 4ppm, 600ppi	*(539)
OL410E/PS Laser Postscript	*(799)

PACIFIC DATA

ProTracer II Ink Jet (CAD Plotter)	969
ProTracer II-GL2 w. HP-GL2 & 2MB	1339
Accessories :	
- HP-GAL Emulation Card	375
- Ink Cartridges	19.50
- Postscript Emulation Card	375
- Sheet Feeder I / II	135/115

PANASONIC

1150 9 pin, 55dBA	139
1624 24 pin	379
2023 24 pin, Quiet (after rebate, 165)	185
2123 24 pin, 43.5dBA, Color capability	239
2130 Quiet Dot Matrix (after rebate, 169)	199
2135 Quiet Dot, Color (after rebate, 205)	255
3123 24 pin, Quiet, Scalable Fonts	259
3124 24 pin, Scalable Fonts, LCD	329
3624 24 pin, Quiet, 46.5dBA	399
J250 Ink Jet, 300dpi, 128 nozzle printhead	*(259)
4430 Laser 5ppm, 1MB	665
4400 Led Page (after rebate, 399)	449
4440 Laser 10ppm	995
4455 Postscript 11ppm	1695
5400 Led Postscript 4ppm. (after rebate, 499)	599
SP-100 Multi-function printer	769
Accessories for 4410, 4420, 4430. 4400 4440, 4450 4450I, 4455, 5400	***call***
Other Accessories :	
- 32k Buffer Dot Matrix KX-P43	65
- Auto Sheet Feeder for 1124 KX-P36	120
- Color Upgrade Kit KX-PCK11	55
- Serial Interface Card PS-13	75
- Single Bin Cut Sheet Feeder KX-PT10	95

SEIKO

Smart Label Printer Plus / Pro	145/245
- Standard Label (2 rolls)	7.95

SUMMAGRAPHICS (Plotter)

DMP-60 A to D Size	1275
DMP-61 A to D Size	1275
DMP-161 A to D size	1599
DMP-162 A to E size pen	1899
Hiplot 7100 A to D w. stand	1999
Hiplot 7200 A to E w. stand	2355

18. SCANNER

HP (flatbed)

ScanJet IIICX Color w. Kit	955
- Auto Document Feeder	475
ScanJet IIIP Gray Scale w. Kit	509

INFO

SF3GS Gray Scale 300 dpi w. OCR	225
SF12C Color 24 bit 1200 dpi w. OCR	349
- w. Auto Document Feeder (SF6CD)	539

LOGITECH (hand)

Scanman Easy Touch w. OCR	169
Scanman 256 / w. Omni Page OCR	135/155
Scanman Color w. Omni Page OCR	255
Scanman Power Page	399

MICROTEK (flatbed color)

Scan Maker II w. Photoshop L.E.	549
Scan Maker IIHR 600 dpi w. Photoshop & OCR	1050
Scan Maker IIHR 600 dpi w. Picture Publisher	825
Scan Maker IISPX 300 x 600 dpi	875
Scan Maker III	2495

TAMARACK (flatbed color)

ArtiScan 24 bit, Color / 256 Gray Levels / SCSI-interface / for PC or Mac	
- w. Photoshop. & OCR 600 / 800 / 1200 dpi	485/585/695
- w. Photoshop 3.0 600 / 800 / 1200 dpi.	635/735/855
Slide Scan Kit (transparency, slide, X-ray) 600 / 800 / 1200 dpi	525/525/595

19. TAPE BACKUP

COLORADO

DJ-20 250MB QIC-80	*(135)
- AB-11 External Tape Port	35
- Cable (2FD & tape backup)	6
- DC2120 Pre-Formatted	12.99
- FC-20 Controller	69
- TC-15 Controller w. compression	155
- KE-09 External Kit w/o Controller	59
- Unix / Xenix Driver	99
DJ-35C Jumbo 350 340MB Int	179
DJ-25C Jumbo 700 680MB Int	259
PT-10 PowerTape 1GB SCSI Int	599
PT-25 PowerTape 2GB 300Kb/s Int	965
PTE-25 PowerTape 2GB Ext	1095
PT-50 PowerTape 4GB 300Kb/s Int	1250
PTE-50 PowerTape 4GB Ext	1495
Tracker 250MB / 350MB (printer port)	285/315
- upgrade fr 250MB to 350MB	39.95
Tracker 680MB (printer port)	385

CONNER

CNR-250MQPT 250MB Ext	315
CNR-4320RT 2GB Int	745
CNR-4350XT 2GB Ext	985
CNR-4324RP 4GB Int	849
CNR-4354XP 4GB Ext	1145
Tape Stor 420MB w. cartridge Int	169
Tape Stor 850MB w. cartridge Int	269
Tape Stor 850MB w. cart. Ext (printer port)	385

EXABYTE

EXB-2501 1 - 2GB SCSI-2 Int	499
EXB-2501 1 - 2GB SCSI-2 Ext	649
FS1G (2501 + Control Kit) Int / Ext	675/*(799)
EXB-4200 4mm Dat. 2GB Int / Ext	799/975
EXB-8205XL 8mm Dat. 3.5 - 7GB Int	1345
EXB-8205XL 8mm Dat. 3.5 - 7GB Ext	1595
EXB-8505XL 8mm Dat. 7 - 14GB Int	2035
EXB-8505XL 8mm Dat. 7 - 14GB Ext	2285

HEWLETT PACKARD

35470 4mm Dat. 2-4GB SCSI Int	789
35480 4mm Dat. 4-8GB SCSI Int	885
C1533 4mm Dat. 8-16GB SCSI Int	1059
HP Mounting Frame to 5.25"	27

OTHERS

Mountain Summit SE250 Int	135
Sytos Plus Backup s/w for Dos / Win	99/95
Tape Cartridges :	
3M, Exabyte, HP, Maxell, Sony	call

20. VGA CARD

ATI

Graphics Expression 2MB PCI / VLB	219/219
Graphics Ultra Plus 2 DRAM w. mouse	199
Graphics Ultra Pro 2 ISA w. mouse	265
Graphics Ultra Pro 2 VRAM VLB	265
Graphics Ultra Pro 2 EISA	315
Graphics Ultra Pro 2 PCI	269
Graphics Pro Turbo 2MB PCI / VLB	379/379
Graphics Pro Turbo 4MB PCI / VLB	589/589
Graphics Wonder 1MB ISA / VLB	135/139
Win Turbo 64 2MB PCI / VLB	299/299

DIAMOND

Stealth 32 2MB PCI	185
Stealth 64 2MB DRAM PCI / VLB	199/199
Stealth Video 64 2MB VRAM PCI / VLB	289/289
- 2MB upgrade	180
Stealth Video 64 4MB VRAM PCI / VLB	469/469
Viper SE VRAM 2MB PCI oem	289
Viper SE VRAM 2MB VLB	349
Viper Pro VRAM 2MB PCI / VLB	399/399

MATROX

IMP Plus 1600 x 1200, 2MB PCI	399
- 2MB upgrade	265
IMP Plus 220 2MB PCI	475

MEDIA VISION

ProGraphics 1024 VL 256 Color 1MB	*(159)

MIRO

Video 20TD Live VLB / PCI	465/465

NUMBER NINE

T134020, 1280 x 1024, 90Hz, S3-928 chip	
GXe Level 12 VRAM 3MB ISA	375
GXe-64 DRAM 1MB PCI / VLB	195/195
GXe-64 DRAM 2MB PCI / VLB	239/239
GXe-64 Pro VRAM 2MB PCI / VLB	339/339
GXe-64 Pro VRAM 4MB PCI / VLB	519/519
Imagine 128 4MB PCI	849
Imagine 128 1600 4MB PCI	1129

ORCHID

Fahrenheit 64 1MB PCI / VLB	159/159
Kelvin 64 Windows Accel. 1MB PCI / ISA	139/139
Kelvin 64 Windows Accelerator 1MB VLB	139
Kelvin 64 Windows Accelerator 2MB PCI	189
Kelvin 64 Windows Accelerator 2MB VLB	189

SPIDER

Spider 64 1MB VLB / PCI	135/135
Spider 64 2MB VLB / PCI	185/185
Spider 64 4MB VLB / PCI	285/285
Tarantula 2MB VRAM VLB / PCI	265/265
Tarantula 4MB VRAM VLB / PCI	375/375

OTHERS

Cirrus Logic CI5428 VLB 1MB / 2MB	99/145
Cirrus Logic GD5434 64 bit 2MB PCI	169
Intel Smart Video Recorder Pro	439
Movie Plus 1100 MPEG Decoder	199
Oak087 Super VGA 1MB	69
Paradise Window Accel 24 bit VGA	*(99)129
S3 Vision 864 64 bit 2MB PCI	179
Sigma Design Real Magic Lite MPEG	*(269)
V-Mate Pro (video encorder : PC to TV)	189
Video Plus (video image grabber)	185
Vitex MCP Card (monographic)	23

SOFTWARE

1. CD SOFTWARE

Call for Wholesale Prices

Titles from $3.99 - $9.95

details and prices .... call or visit our store

BRODERBUND

3D Home Architech	58
Alian Tale	36
Arthur's Birthday MPC / MAC	35
Arthur's Teacher Trouble MPC / MAC	15
Harry's Haunted House MPC / MAC	36
Just Grandma and Me WIN / MAC	15
Kid Pix Studio	43
Living Book Sampler	3.99
Math Workshop	38
MYST MPC oem / reg	29/45
MYST MAC / Guide Book	48/16
Playroom	35
Printshop Deluxe CD Pack	75
Ruff's Bone MPC / MAC	36
The Little Monsters At School MPC / MAC	36
The New Kid On The Block MPC / MAC	35
The Tortoise and the Hare MPC / MAC	35
Where in the World is Carmen Sandiego	18

CHESTNUT

Titles	*from 8.95*

COREL

Corel Artshow (book + CD) '94 / '95	29/32
Corel Gallery	34
Corel Photo Paint 5 Tools	29.95
Corel Professional Photo CD	17.95 each

DISCIS Series DOS, WIN, MAC

Titles	*from 9.95*

FUTURE THINKING

Titles	*from 8.50*

LASER SOFT

Titles	*from 9.95*

LIMELIGHT MEDIA

Titles	*from 9.95*

MEDIA VISION

Titles	*from 9.95*

MICROSOFT

Ancient Land oem / reg	29/45
Art Gallery Multimedia MPC oem / reg	29/*(45)
Cinemania '94 / '95 MPC	29.95/*(45)
Complete Baseball MPC	*(29.95)
Dangerous Creatures oem / reg	25/45
Dinosaur oem / reg MPC	29/53
Encarta '95 oem / reg MPC	39/79
Entertainment Sampler	5.95
Explorapedia - World of Nature	33
Frank Lloyd Wright	55
Golf oem MPC	17
Haunted House	46
Magic School Bus: Human Body	45
Magic School House: Solar Systems	45
Multimedia Beethoven 9th Symphony	53
Multimedia Bookshelf '94 oem / reg WIN	34/*(45)
Multimedia Mozart MPC	53
Multimedia Schubert MPC	53
Multimedia Stravinsky MPC	53
Musical Instruments MPC oem / reg.	29/53
Office Developer's Tool Kit	*(45)
Office Professional 4.3	*(269)
Ultimate Robot	55
Visual C++ 32 bit v1.0	*(49)
Win32 + Win NT 3.1	*(45)
Works v3.0 + Money	29

POWER SOURCE

Titles	*from 7.50*

ROCELCO

Titles	*from 9.95*

WALNUT CREEK

4.4 BSD Lite	17
2000 True Type Fonts	24
Ada CD Rom (new)	22
Beer - Home Brewing	25
Best Application (business & home)	29
C User Group Library	22
CD Rom of CD Rom	*(9)
CICA MS Windows '95	13
Clipart Cornucopeia	17
CP/M	23
Doom Shareware vol.1	8
Doom Tool Kit	15
East Asian Text Processing	23
Fractal Frenzy	17
Free BSD 2.0 (Jan '95)	*(19)
G N U for Unix & Sun	23
Garbo DOS, MAC	13
GIF Galore	17
Giga Games (3000 titles) / vol.2	11/16
Hobbes OS/2 (Mar '95)	14
Inter Net Info	18
La Collection (Eng & Spanish)	18
Libris Brittania	25
Linux 2.0 Tool Kit (2CD)	18
Music Workshop	22
Nebula for Next Step Intel	25
Nova for NEXT	25
PERL	22
Plug and Play Linux (Nov '94)	19
Project Gutterburg (Nov '94)	18
QRZ: Ham Radio (call book)	13
Ready to Run Hobbes OS/2	18
Sampler	3.99
Scientific & Technology Library	23
Sentimental Wings	26
Simtel MS Dos (2CD)	13
Source Code for Unix	18
Space and Astronomy	17
Sprite for Sun	14
TCL/TK Source Code	21
Teacher 2000 (education programs)	18
Travel Adventure	18
Ultra Mac Games MAC	23
Unix - System V v4.2	29
Visions	23
X11R6 for Unix	23

OTHERS

3D Body Adventure DOS, WIN	35
3D Dinosaur Adventure	29.95
3D Landscape	48
3D Madness	28
5th Fleet	42
7th Guest DOS / Guide Book	19/16
9 Digit Zipcode Phonebook	17
11 Million Business Phonebook '95	19
70 Million Households Phonebook '94	19
200+ Waycool Tool Windows Games	15
500 Fonts WIN	19
1830 Railroad	37
1942 Pacific Airwar Gold	49.95
4000 Icons	18
7000 Cliparts	15
A Brief History of Time	39.95
A Hard Day's Night WIN	29
AAA Travel Planer	19
Absolute Beginners Multimedia	24
Absolute Mayhem	15
Ace of Pacific oem	19.50
Ace Over Europe oem	19.50
Aces Critical Mission	15
Aces of the Deep (sierra)	49
A.D.A.M. Inside Story WIN / Demo	39/2.99
Advanced Dungeons & Dragons 3-pack	19.99
Adventure of Huckerberry Finn	19.99
Adventure of MacBeth	19.99
Adventure of Tom Sawyer	19.99
Adventures (1000 tours) MPC oem	17
Aegis Guardian of Fleet oem / reg	22/49
Air Harvic	43
Aladdin Activity Center	*(24.99)27
Alian Logic oem	19
Alian Virus	39.95
Alice Adventure in Wonderland	48
Alone in the Dark 1 / 1+2 / 3	*(19)/43/45
Alphabet Blocks (age 3-5)	36

*(price) .... special, while supplies last

oem .... $ bundled with hareware only

CENTRAL
COMPUTER SYSTEMS INC.
WIDE SELECTION AT LOW PRICES

FAX : 408 241-0390 TEL : 408 248-5888 / 408 241-0185
Email : CentOn@aol.com 820 Kiely Blvd., Santa Clara CA 95051

Amanda Stories	*(15)
Amazing Universe	36
American Alive Tour Guide 2.0 WIN	15
American Civil War	36
American Heritage Talking Dictionary	*(16)
American Vista	19.95
Animal Alphabet MPC	18
Animal Safari (age 3 +) WIN, MAC	34
Animals Clipart	13
Arc of Doom	39
Arctic Baron	*(19)
Armored Fist	49.95
Art Appeal Business / Govt./ Education	19/18/17
Arts & Letters : Space Age	*(25)
Asia Alive Tour Guide 2.0 WIN	15
A.S.P. Shareware	15
Astronica	44
Asymetrix Compel + Media Blitz 2.0	17
Atlantis Internet	17
Atomic Arcade	13
Auto Almanac '95	11
Auto Insight + Body Insight + PC Insight	26
Barbie Magical House	34
Barron's College Guide	15
Battle Chess Enhanced MPC	*(15)19
Battle Isle 2200	36
Beethoven's 5th Symphony	*(14)19
Beginning Reading (age 4-8)	36
Beneath A Steel Sky oem / reg	24/38
Best of CICA	14
Best of Internet Games	25
Best of OS/2	15
Betrayal at Krondon	19.95
Bible Heaven	11
Bible Library (9 books + 20 references)	19
Big Green	16
Bioforge (by EA)	47
Black Beauty (video, interactive)	26
Black Throne (by Interplay)	35
Blakestone	28
Blendor - Music Magazine WIN, MAC	14.95
Blind Date	42
Blood Net oem / reg	23/45
Blood Stone	12
Blown Away oem / reg	19.95/39
Blue Force	15
Blue Max	12
Bob Dylan : Highway 61 WIN, MAC	42
Boby Fisher Teaches Chess	35
Body Count (3D game)	29.95
Body Works 3.0 MPC	*(29.99)39
Body Works Voyage oem / reg	16/29
Borders & Backgrounds	15
Bug Adventure	29.95
BUK BIK Creature Games	17
Burean 13 (3D animation)	36
Business Clipart (by Pro One)	14
Business Library	13
Butterflies of the World MPC	*(12)18
Busy Town (age 3 - 7) DOS	29
Campaign	36
Cardshop Plus WIN	16
Cartoon History of Universe	33
Cat Came Back	14
CD Blaster	16
CD Deluxe Pack 4	16
CD Games - Kids Collection	11
CD Karaoke (groupware)	18
CD Source Book of American History	19.50
Chadwick and the Egg Thief	*(19.95)32
Charlie Chaplin Movie #1 / #2	12/12
Chef Ware - Deluxe DOS, WIN	*(15)
Chess (T2 , 4 gameboards)	13
Chess Master 4000 Turbo MPC	16
China: Home of the Dragon	19.95
Chuck Yeager's : Air Combat	*(19)
CICA Windows Explosion	11
Civilization oem	24
Classic Adventure (4 games)	*(15)
Classic Air Battles (4 games)	*(15)
Classic Collection (4 titles)	19
Clik Interactive	19.95
Club Dead (MTV)	42
Colonization	(oem 29.95)44
Colossus	*(13)17
Commanche + 100 Missions DOS	45
Commander Blood oem / reg	19/39.95
Companions of Zanth	39.95
Complete Algebra	15
Complete Bible	15
Complete Guide to Drugs	19
Complete Windows Set (talk)	17
Compton's Interactive Encyc. '95 WIN	29
Computer Industry Almanac '94-'95	14
Cookbook Heaven vol.1 / vol.2	11/13
Cool School House (5 titles)	25
Corel Draw 5.0 Companion (2CD)	35
Corel Draw 5.0 Unleashed	34
Corridor 7 oem / reg	18/33
Count Down oem	14
Countries of the World (new)	16
Cow Boy Casino	*(26)
Crayola Amazing Adventure (age 3-6)	39.95
Crayola Art Studio (age 6-12)	39
Creature Shock (by Virgin)	49
Creepy Crawlies	18
Crime Patrol	39.95
Curse of Enchantia	15
Cute 'n' Cuddies	*(15)
Cyberia oem / reg	25/*(28)
Cyberplasm Formula	*(11)14
Cyberwar (4CD) oem / reg	39/46
Cyclemania oem / reg	29/37
Cyclones oem	19
D Day : Multimedia Encyclopedia	*(9.95)
D Day : Normandy 44 (historical review)	36
D Zone (collector's CD)	27
Daemongate	*(15)
Dance with ABC	17
Dark Forces	49.95
Dark Legions	19
Dark Sun I : Shattered Lands	19
Dark Sun II : Wake of the Ravager	19
Dawn Patrol oem / reg	22/45
Day of the Tentacle	17
Death Gate	37
Deep Voyager WIN, MAC	*(11)
Delta V	*(26)
Deluxe Game Pack (4 on 1)	15
Descent (by Interplay)	39
Desert Storm MPC, MAC	12
Desert Strike	*(19)32
Dictionary for Kids (Merrian - Webster)	19
Dictionary of the Living World	*(9.95)
Diggers DOS	39
Dinosaur Encyclopedia	18
Dinosaur Museum (Smithsonian Institution)	38
Disc World (game)	39
Discoveries of the Deep	19
Doctor's Home Remedies WIN, MAC	*(11)18
Doctor Linux (CD + book)	27
Dominus	37
Doom II	45
Doom II Accessory Pack 4 (1800 levels)	16
Doom II Clue Book	12
Doom II Explosion	17
Doom II Screen Saver	23
Doom II Strategy Game Book	15
Doom Explosion & Utility (for Doom I & II)	19.99
Dracular Unleashed	24
Dragon's Lair DOS oem / reg	19.95/*(29.95)
Dragon Lore oem / reg	23/49.95
Dragon Sphere DOS	*(18)
Dream Vacation Hawaiian Style '95	*(19.95)29
Dream Web	24
EA : Bridge + Gamebit	*(16)
EA Kid's : Art Center	36
EA Kid's Pak (5 titles)	22
Eagle Eye Mysteries in London	35
Early Learning Collection	*(13)16
Earth Seige	49.95
Ecstatica oem / reg.	25/39
Elder Scrolls Arena (w. multiple ending)	46
Electronic Arts: Fantasy Pak (4 titles)	25
Electronic Arts: Entertainment Pak (4 titles)	25
Electronic Arts: Simulation Pak (4 titles)	25
Emtombed (3D game)	37
Encore (3 games)	19
Entertainment Madness	32
ESX: Auto CAD Resource Guide	11
ESX: Dennis Miller - Greek to Me	11
ESX: Dennis Miller - News to Me	11
ESX: Flying High	11
ESX: Food Trek (Asian cooking)	11
ESX: Planning for College	11
ESX: Planning for Retirement	11
ESX: Unique Background #1 / #2	11/11
Europe Alive Tour Guide 2.0 WIN	16
Europe I (scenry for MS Flight Sim)	29
Eye Witness Encyclopedia of Science	48
F-14 Fleet Defender	49.50
F-15 Strike Eagle III DOS	14
F-15 Strike Eagle Hits 6	19.95
F-117A oem / reg.	15/29
Falcon Gold + 4 Add On	57
Falcon 3.0 + Flight Control II (joystick)	87
Family Bible Multimedia	19
Family Doctor III MPC	17
Family Novel	17
Family Zoo Animal Encyclopedia MPC	15
Fantasy Adventure 3-pack	19.99
Fantasy Fest (AD&D 4 new games)	48
Fatal Distraction	22
FIFA Int'l Soccer Pack (w. PC game Pad)	43
Fire Fighter (by Davidson)	*(19.50)
First Wave Game Pak (5 games)	25
Fisher Price : 123	32
Fisher Price : ABC	32
Fisher Price : Dream House	32
Flight Commander II	42
Flight Light	22
Flight-Sims (Harrier + Mig29M)	19.95
Flighter Wings	39.95
Flying Colors	37
Flying Warbirds	25
Forbidden Subjects I oem / III	18/24
Font Access	16
Font Heaven (2200+ fonts)	13
Frankenstein oem / reg	16/39
Front Page Football Pro '95	52
Frontier Elite II	*(23)
Fun with 100 Words	17
Gabriel Knight : Sins of the Fathers MPC	19
Gadget (invention, travel & adventures)	49
Game Compendium	19
Game Madness & More (interactive, 2CD)	29
Gazillonaire (by Spectrum)	32
Geekwad	18
Genghis Khan	14
Gingerbread Man (game)	32
Global Explorer (DeLORME) MPC	59
Go Digital Interactive	14.95
Gold Medallion Games	18
Goblins v.1 / v.2 / v.3	13/15/19
God of Thunder	16
Grandest Fleet	37
Graphic Texture	14
Graphics FS	16
Gray Wolf	25
Great Literature Plus	17
Great Naval Battles oem	13
Great Naval Battles III	49
Greatest Book Collection DOS, WIN	34
Grolier's Encyclopedia 6.0 MAC	34
Grolier's Encyc. 7.0 '95 oem / reg	28/79.95
Grooves	18
Guide Book Mathematics	12
Guiness Disc of Records '94	36
Gunship + Island + Ice Scenerio	19.95
Hacker Chrumicles v.1 / v.2	22/25
Halo Desktop Imager WIN	17
Hardball (baseball)	39
Hardball III Collection	19.99
Hawaiian Fantasy Bodies (swimsuit)	11
Health and Medical Phones	14
Healthy Cooking MPC, MAC	13
Hearts (20 years of Rock 'n Roll)	33
Heimdahll 2	19
Heinimann's Children Encyclopedia	17
Hell (thriller) oem / reg	15/39
Hell Cab (NY tourist) WIN oem / reg	22/44
HELLO KITTY: Big Fun Art	19
HELLO KITTY: Big Fun Deluxe	34
HELLO KITTY: Big Fun Shapes & Numbers	19
HELLO KITTY: Big Fun Piano	19
HELLO KITTY: Big Fun Story Making	19
Heretic (shareware)	*(9.99)13
High Seas Trader	42
High Textures	14
History of Painting	15
History of the World PC & MAC	47
Hitchhiking on the Information Highway	39
Hodj & Podj	43
Holiday Clipart vol.2	14
Hollywood Collection	15
Holy Bible DOS	16
Home Designer (Softkey)	24
Home Designer Gold	35
Home Gardener	16
Home Improvement oem / reg	18/24
Home Medical Advisor Prof	49
Home Repair Encyclopedia	29
Home Sweet Home	*(16)
Honer Roll Mathematics	17
Horde DOS	*(19.99)
How The World Work	23
How Things Grow	16
How Things Work	29
How Things Work in Busy Town	33
Human Calculator (math games)	29
Hypnotic Harp MPC	14
Illustrated Holy Bible	17
Image Warehouse	18
INCA 2 DOS oem / reg	19.95/34
In the Company of Whales	35
Incredible Image Pak	59.95
Incredible Machine II	44
Indiana Jones : Atlantis	*(19)
Indy Car Racing	19.50
Inferno (ocean) oem / reg	19.50/49.95
Info Magic : BSDisk	18
Info Magic : CICA for Windows (3CD)	19
Info Magic : InterNet Tools	16
Info Magic : Linux 3CD '94 / 4CD '95	10.95/17
Info Magic : Linux Install (book)	14
Info Magic : Linux Tool Kit (includes slackware)	25
Info Magic : PERL & TCL/TK	19
Info Magic : Source Code	15
Info Magic : Standard	15
Info Magic : USENET (2CD)	13
Info MAC V	24
Infopedia (encyclopedia + reference tools)	25
Inherited the Earth	27
Inprint Library Cartoon Idiom	13
Internet Access '95	17
Interactive Space Encyclopedia	27
International Athletic oem / reg	11/15
Interplay's Classic Collection	19
Interplay's 10 Year Anthologh (10 games)	25
Iron Assault (by Virgin)	39.95
Iron Helix MPC	16
IVI : AnnaTommy	29.99
IVI : Safety Monkey	18
IVI : Virtual Body oem / reg	18/23
IVI : Welcome to Bodyland	19
Jack Nicdlaus Signature Golf	18
Jack Nicklaus Tour Collection	19.99
Jagged Alliance	49
Jammit (basketball) w. PC Pro Pad	26
Japanese for Business WIN, MAC	125
Jazz JackRabbit + One Must Fall 2097	13
Jazz of Multimedia History oem / reg	13/35
Jets oem	13
Jewel of Oracle (by Discis)	39
J.F.K. Assassination oem / reg	15/37
Journeyman Project MPC	29
Journeyman Project Turbo oem	18
Jump: David Bowie	*(27)32
Jump Raven MPC	39
Just for Kids (learning game)	15
Jutland DOS	19
K to 12 Grade	11
Kathy Smith: Fat Burning Program	17
KEROPPI: Day Hopper	33
Key Travel Map	13
Keys to Maramon	12
Kid CAD	34
Kid Mail Connection	32
Kid Works 2 WIN, MAC	36
Kid's Typing	36
King Arthur's Magic Castle	16
King's Quest VI	17
King's Quest VII PC / MAC	*(49.95)/53.95
King's Quest VII Demo	4.50
Klick & Play (by Maxis)	39
Kodak Photo CD Access oem WIN	14
Kyrandia I / II - Hand of Fate	14/19
Kyrandia III - Nalcom's Revenge oem / reg	29/43
L-Zone	42
Lands of the Lore WIN / Guide Book	39/12
Languages of the World WIN	15
Las Vegas Scenery (for MS Flight Sim)	29.99
Last Dinosaur Egg MPC	16
Lawnmower Man oem / reg DOS	19/*(39)
Learn to Do Desktop Publishing	12
Learn to Do Word Processing	37
Learn to Speak English PC,MAC oem / reg	32/55
Learn to Speak French 4.0 PC, MAC	89
Learn to Speak Japanese	55
Learn to Speak Spanish 4.0 PC, MAC	89
Learning Fun House	18
Legend of Oz	12
Leisure Larry 6 DOS oem / reg	*(22)/44
Lemmings Chronicles	39
Leonardo the Inventor oem / reg	22/29
Library of the Future 3rd Edition	95
Like the Dickens (the complete works)	19
Links 386 Pro (by Access)	26
Linux 1995 Developer's Kit (2CD)	*(16)24
Linux + BSD	19.95
Linux Installation (book + CD)	17
Linux Quarterly (w. slackware prof.)	23
Lion King Story Book	*(29.99)
Live Action Football	36
Lode Runner oem / reg	19.50/46
Lords of Realm	43
Lords of Rings oem DOS	18
Lost & Found v.1 / v.2 / v.3 (for kids)	28/28/28
Lost Eden (by Origin)	42
Lucas Games MAC	22
Lunicus MPC oem / reg	17/29
MAABUS	36
Machiavelli the Prince	44
Mac Beth - Karaoke	15
MacMillian Dictionary for Children (age 7-12)	17
Mad Dog McCree I oem	17
Mad Dog II : the Lost Gold oem / reg	16/19
Madness of Roland	32
Magic Carpet oem / reg	39.95/46
Magic Theater (knowledge adventure)	29
Magician's Secret Cards	16
Magician's Secret Close-ups	16
Mammals (national geographic) DOS	17
Man Enough (2CD)	17
Mantis Flighter	12
Map Expert v.2 WIN	275
Map & Go (DeLorme)	*(38)47
Mario Early Years (age 2-6)	16
Mario is Missing - Deluxe	15
Mario Time Machine	12
Martial Art Adventure	29.99
Master of Magic (by Microprose)	45
Master of ORION	45
Math Blaster Episode 1 (age 6-12)	36
Math Blaster Episode 2 (age 8-13)	38
Math Rabbit (age 4-7)	39
Mathematics Library (highschool)	12
Mavis Beacon Teaches Typing 3.0	15
Mavis Beacon Teaches Typing for Kids	19
Mayo Clinic: Health Book MPC / MAC	15/19
Mayo Clinic: Pharmacist oem / reg	19/39
Mayo Clinic: Sports & Health Fitness	18
Mayo Clinic: The Total Heart oem / reg	16/25
Me, Myself & I	*(16)
Medical Dictionary	27
Medical Video	19
Mega CD Rom 5	16
Mega Games 3	18
Mega Race DOS	17
Mega Windows 4	18
Menzoberranzan (AD&D) oem	19.95
Michael Gordon In Flight	*(16)
Microcosm oem	17
Microprose Best Games (4 games)	18

Melting Pot (4000+ recipes)	12
Middle School Suite	15
Midi Musicshop Professional	16
Might and Magic: World of Xeen	39
Mighty Morphin: Power Ranger oem / reg	15/26
Millennium Auction	49
MM Encyclopedia of Knowledge	15
Monarch Notes DOS, MAC oem / reg	17/39
Monty Python : Complete Waste of Time	57
Morgan's Trivia Machine w. Ugly Ducking (age 7-14)	32
Morphology 101	19
Mortal Kombat II	42
Multimedia Audio Collection Pro	18
Multimedia Learning Fun	15
Multimedia Mega Bundle of 5	19.99
Muppet Reading Phonics	26
Musical Instruments of Symphony MPC	15
Music Game	27
Music Read, Write & Play	22
My Favorite Monster	32
My First Incredible Amazing Dictionary	*(29.99)
NAS Car Racing oem / reg	25/49.95
NCAA Basketball	39
NFL's 75 Greatest Movie	29.99
New Kid Edutainment #1 (age 3-8)	12
New Kid Edutainment #2 (age 8-16)	12
New York Time Capsule	24
Next Step Mars	38
Nikko - Elephant Adventure (age 2-7)	16
Nigel Mansell + Lotus (by Racing Games)	19.95
Night of Xentar	39.95
Night Owl v.13 / v.14 / v.15	15/17/19
Night Owl 6 Pak	21
Night Owl Graphic	14
Night Owl Game	13
No World Order (Tr-i)	29
Noctropolis	53
Nomad DOS	*(19.95)
Nova Storm (3D Flight Sim) oem / reg	26/39
Ocean Below MPC	12
Operation Air Storm	18
Oregon Trail II	56
Outpost oem / reg.	19.95/44.95
Overload D-Day	42
Oxford English Reference Library OS/2, DOS	95
Ozzie's World	17
Pagemaster	48
Panzer General / Guide Book	19/14.50
Parenting DOS	17
PC Library	15
PC Technician	18
Perfect General	11
Peter Gabriel (by Interplay)	65
PharmAssist	25
Phoenix 5.0 Shareware	*(9.95)15
Phone Disk '95 - business WIN, DOS, MAC	49
Phone Disk USA '94 - residential	48
Phone Disk USA '94 - bus + res	79
Phone Disk Fall '94 - power finder	145
Photo CD Book & CD	24
Photo Factory of Windows	19
Picture Atlas of the World oem / reg DOS	23/65
Picture It	19.95
Picture Library	17
Pier 5 Shareware	22
Pinacotheca (pintura classical painting) MPC	13
Pizza Tycoon	44
Planetary Taxi (by Virgin)	29
Play and Learn for Kids	13
Playing with Language MPC (English, French, German, Japanese, Spanish)	17 ea.
Police Quest 4 oem / reg	*(19.95)/45
Popular Tours + Powe Monger	*(16)
Power Hits: Battle Tech (3 games)	22
Power Hits: Movies (4 games)	23
Power Hits: Sports (4 games)	21
Prehistoria (by Grolier) MPC	19
President	17
Pretty Women (swimware) WIN, MAC	15
Prince Interactive	39.95
Print Artist (by Maxis)	49
Privatee Classic	19
Pro Phone: Direct Phone '95 WIN, DOS,MAC	79
- for PC oem / '93 version	35/15
Pro Phone: Free Phone (toll free #)	16
Pro Phone: Home Phone '95 WIN, MAC	39
Pro Phone: Select Phone '95 WIN, MAC	149
- for PC oem	75
Pronounciation Tutor v.3 (Fren / Ger / Span)	36
Psychotron oem / reg	19/36
Putt Putt: Goes to the Moon oem / reg	19/36
Putt Putt: Joins The Parade oem / reg	14/35
Putt Putt & Fatty Bear Activity Center	19.95
Quarantine	(oem 29)43
Quest for Glory IV: Shadows of Darkness	47
Quick & Easy Spanish	17
Radioactive	18
Raiden	(oem 24)37
Ravenloft (AD&D)	19
Reader Rabbit 1 Deluxe (age 3-6)	39.95
Reader Rabbit 2 Deluxe (age 5-8)	39.95
Reader Rabbit 3 Deluxe (age 6-9)	39.95
Reading Carnival	19.95
Real World Math	16
Rebel Assault MPC / Guide Book	25/14.50

Red Storm Rising + F117A	24
Redshift WIN	49
Reference Library DOS	15
Relentless	(oem 39.95)47
Renegade Flight Sim oem / reg	19.50/44
Rescue the Scientists	33
Resident Freak Show (animation & design)	19
Retribution	(oem 24)36
Return of the Phantom	27
Return to the Ringworld	45
Return to Zork DOS / Hint Book	18/9.95
Reunion oem / reg	18/37
Rick Rabbit ABC (age 2-5)	19
Ring World	16
Rise of the Robots oem / reg	23/47
Rise of Traid	39.95
Road Scholar: Trivia Game WIN, MAC	29
Robocop + Dune	19
Rodney Fun Screen	17
Royal Flush (digital pinball)	35
S.A.T.- I Study Ware	34
S.A.T. Personal Trainer 2.0	38
Saber Team oem	25
Saber Team (MicroLeague Interactive)	37
Sam & Max Hit the Road	32
Saturday Night Live: 1st of 20 years	32
School Days	18
Sea Wolf	(oem 18)44
Seal Team Classic	*(16)
Secret of the Stargate	29
Secret Garden (video, interactive)	26
Seinfeld (screen saver + planner)	19
Sento + Creep Crash (2 graphic games)	24
Seasame Street Numbers	34
Shadow Caster	*(16)45
Shadow of the Comet	39.95
Shadows of Cairn	39.95
Shanghai Greatest Moment	42
Shareware Heaven #2 / #3	15/19
Shareware On Line 4	37
Shareware Studio #1 / #2 / #3	12/12/12
Shark Alert oem / reg	19/29
Sherlock Holmes Bundle (1+2+3)	*(29.95)
Shuttle (by Virgin Games)	23
SI: Swimsuit Calendar	29
Sights & Sounds	16
Sim City 2000 oem / reg	19/55
Sim City Enhanced DOS	19.95
Simtel CCT MS-Dos Collection (Aug'94)	19
Sing-a-long Around the World (Dr.T)	13
Sing An American Story	18
Sitting On A Farm	16
Skier's Encyclopedia	35
Slam City	49
So Much Modem Madness (BBS & Ultilities)	17
Soft Kill	21
Software Jukebox Arcade DOS	29
Software Vault: Ruby Collection	15
Software Vault: Sapphire Collection	19
Sound Explorer	17
Space Ace	39.95
Space Adventure	15
Space Ship Warlock PC, MAC	*(17)34
Space Pirates	26
Spear of Destiny (mission II & III) DOS	39.95
Spectrum VR (velocity)	42
Speed (knowledge adventure)	*(16)29
Speed Clip Library	14
Spelling Blizzard (age 9-12)	36
Sports Best (3 in 1) DOS	12
Sports Illustrated Almanac '94 oem / reg	*(12)/18
Stalingard WIN, MAC	43
Star Control Collection (1+2)	19
Star Crusader by Take 2	17
Star Legions	14
Star Reach	42
Star Trek: 25th Anniversary oem / reg.	17/55
Star Trek Collectible	16
Star Trek : Original TV	*(24)29
Ster Trek : Next Generation Technical Manual	42
Star War Chess MPC	19
Stereo Game Workshop (Magic Eye)	25
Story Book Maker	*(16)
Stow-away	39.99
Street Atlas 2.0 (by DeLORME)	*(75)
Street Fighter Series (vol. 1 + 2)	32
Strike Commander / Privateer	*(16)
Strip Poker Pro	32
Student Writing Center (by Learning Co.)	53
Stun and Run	15
Subwar 2050+ oem / reg	25/39
Super Arcade Game	17
Super Karts	46
Super Bowl Commemorative	53
Super Sport II (3CD)	22
Super Type Mystery Library	13
Supersonic oem / reg	19/46
Swinsuits WIN, MAC	15
Symptons, Illness & Surgery	35
Syndicate Plus	*(18)
Systems Shock oem / reg.	39.95/49.95
T.F.X. Flight Simulator	*(26)
Take Your Best Shot	23
Tank Commander	52
Tchaikowsky's 1812	36

Terror for the Deep (X-com II)	44
The Animals MPC / MAC	11/19
The First Emperor of China	*(15)19
The Four Seasons (Vivaldi)	13
The Musical World of Professor Piccolo	*(29)49
The Pillbook (medical)	29
The Ultimate Human Body (Dorling)	49
The Way Things Work (Dorling)	*(48)
Theme Park	43
Think and Talk : Italian / German	99/99
Thinking Game Around The World (age 4-12)	11
Thinking Things & Kid Desk	35
Time Almanac: Man of Decade	17
Time Shop	18
Tornado + Falcon 3.0	*(26)34
Tornado w. book	19
Top 50 Games WIN	19
Top 200 Dos Games	15
Top 100 Kids Games	15
Top 100 Windows Games	15
Total Baseball	12
Tower of Fear	14
Transport Tycoon	47
Travel Map	15
Treasure Galexy	38
Treasure Mountain (by Learning Co.)	39
Triple Play (Eng / Fren / Span) oem / reg	22/*(29)
Tuneland MPC oem / reg	24/45
Twain's World	18
Twilight Zone Screen Saver	25
UFO	22
Ultima VIII (w. speech pk) DOS	36
Ultima Domain	16
Ultimate Shareware Collection II	13
Ultra Bots Classic	16
Under A Killing Moon / Guide Book	49.95/15
Undersea Adventure	39.95
Undersea + Kid's Zoo + American Adventure	19
Universal + Cooperation	19.95
Universe	19
US-Air Power	12
US-Civil War	19
US History Multimedia MPC	19.50
US Navy Fighters	(oem 39.95)49
US-World War II	19
USA California	18
USA Today '90s	16
USS Ticonderoca oem	19.50
Vampire Coffin MPC	*(12)16
VR Workshop	*(33)37
Video Cube - Space	*(15)
Virtual Vegas oem / reg	17/19
Vortex (Quantum Gate II)	42
Voyeur - Interactive Movie	49
Wacky Funsters	17
Warcraft	42
Warplanes	*(35)43
Websters Interactive Encyclopedia	19.50
Weekend Home Project	18
Whales and Dolphins MPC	18
What Would You Do At Home?	27
Wheel of Fortune	32
Who Kill Brett Penance	13
Who Kill Taylor French	13
Who Shot Johnny Rock DOS	*(19)
Wild Blue Yonder	43
Windows Resume	16
Wing Commander 1 + 2	37
Wing Commander 2	16
Wing Commander 3	49.95
- bundle special (T-shirt + the film-making of)	65
- Hint Book + Film CD	19.95
Wing Commander + Indy Car 500	15
Wing Commander + Privateer	*(17)
Wings of Glory	(oem 39.95)44
Wings Over Europe	35
Wizard 3.0 MPC	11
Woodstock: 25th Anniversary	39
Wolf (adventure + simulation)	14
Wolf 3D Mania	13
Wonder Land (by Mindscape)	17
Wonder Ruth Goes Exploring	13
Wonder Ruth Goes to Town	13
Word Attack 3 (by Davidson)	32
Word Games	16
World Atlas 5.0	12
World Adventure 5 Pack	26
World Beat oem	12
World Circuit	16
World Fact Book Multimedia	17
World History Multimedia MPC	19.50
World War II	23
World of Business	13
World of Flight Simulator	*(19.95)28
World of Internet	15
World of Multimedia	13
World of Numbers	18
World of Utilities	13
Wrath of the Demon DOS	17
Wrath of Gods	39.95
X-Com (UFO defense)	39.95
X-Wing / Guide Book	*(38)/15.50
Zany's Give Away (source CD)	16
Zargon Zoo	36
Zephyr - 3D	*(32)

Zeppelin	*(22)
Zillion Sound	18
Zool 2 oem	19
Zool + Zool 2	19.95
Zork Anthrology	18

CD BUNDLE

3 ft. 6 Pack	19.99
5 ft 10 Pk vol.1 / vol.2 / vol.3	29.50/29.95/29.99
10 Pak	34
Best 10 Pack	29.95
Business 6 Pak	29.95
CD Case / Case + 16 Titles	19.99/79
CD Deluxe Pak 4	16
CD Pak for Win (3CD)	39
Family Fun & Learning Pak (3CD)	24
Graphics 6 Pack (PC & MAC)	32
Home Office CD Value Pak (5CD)	29
Lifestyle CD 4-Pak	19.95
MAC - 4 Pak	29.99
Max Pak (6CD)	59
Mega Pack 1 (6CD) / Pack 2 (11CD)	24/34
Mega Pack 11CD	29
Mile High Club (8CD of Flight Sim)	29.95
One Stop CD Shop (Softkey 11CD)	29.95
Super 10 CD Value Pak	34
Take 10 Pack	36
Treasure Pack I WIN, MAC	29.95
Ultimate Game Collection (6 titles)	29.95
Ultimate Home Collection	25.95
Win Win 2 (3CD, 14 titles)	36

CD-I (Impact) / MPEG

Movie Plus 1100 MPEG-I Decoder	199
Sigma Design Real Magic Lite MPEG Card	*(269)
Titles	*from 24.99*

ADULT TITLES

DMG (interactive XXX)

Titles at** .... **17.99 each

Chicky Chicks Climax
Extasy Eruption
Luscious Lips Red Hot P Galore

Titles at** .... **19.95 each

Best of Blonde Bra Bustin Babes

Titles at** .... **23.95 each

As Time Goes By Candy Snacker
Girlfriend 1 Lady Sharon Starlet

Titles at** .... **32.95 each

Boy Friend 1 Fury Hairassment
Swallower View To A Thrill

IZAKAYA

All titles** .... ***(14.95) each

- Affair vol.1 (movie) MPC
- Attraction 1 / 2 (movie) MPC
- Autumn Eros (interactive) WIN
- Butterfly (movie + photo)
- Cool Girl (movie) MPC
- Danger Zoom (movie + photo)
- Dinner Party (interactive X) MPC
- Esposure WIN, MAC - Exotic Door WIN
- Forest I / II / III (movie, photo, game)
- Mermaid (movie, photo in Japanese)
- Modem Eve (movie + photo)
- Pet Room (movie + photo)
- Scandal WIN - Sweet Heart WIN
- Thunder of Spring (interactive X) MPC

LEGEND MULTIMEDIA (xxx movie)

Best of Legend Sampler	9.95
All titles . (CD only)	***19.95 each***
**** special bundle set w. video***	***27.95 each***

- All That Sex - American Built
- Biker Chicks in Love - Collectible
- Defending Sex Life - Evil Woman
- Elvis Slept Here - For Ever
- Jiggly Queens - Kelly Eighteen
- Southern Exposure - The Vision
- The Naked Edge - Titty Slickers
- Wet Nurses

NEW MACHINE

6-Pack Bundle........................ 39.95
includes : - Insatiable ; Biker Babes
Legend 4 ; A Taste of Erotica
Digital Dancing ; Legends of Porn 2

New Machine Erotic Sampler 8.95

All titles** .... **23.95 each

- A Pussy called Wanda - Asian Heat
- Biker Babies - Cafe Flesh
- Curse of Cat Women - Hidden Obession
- House of Dreams - Insatiable
- Legend IV - Legend of Porn
- Legend of Overfiend (cartoon : Urotsukidoji)
- Mind Shadow - Mode Wife
- New Wave Hooker 2 - Night Trip II
- Put in Gere - Secret

All titles** .... **27.95 each

- American Girls #2 - Adult Palate 2
- Asian Palate - Blonde Bombshells
- Digital Dancing - Girls & Girls
- Lady in Spain - Traci, I love you

All titles** .... **32.95 each

- Dirty Debutantes - Night Watch II

All titles** .... **43.95 each

- Adult Movie Almanac - Dream Machine

CENTRAL
COMPUTER SYSTEMS INC.
WIDE SELECTION AT LOW PRICES

FAX : 408 241-0390 **TEL : 408 248-5888 / 408 241-0185**
Email : CentOn@aol.com **820 Kiely Blvd., Santa Clara CA 95051**

Page 7 / 7

Power Source Series :

Gifs and Video titles .... 9.95 ea.

- Analizer
- Animated Lust
- Babes in Heat
- Cartoon Fantasy
- Crowberry (video)
- Daydream
- Devil or Angel
- Dynastic Background Flowers
- Enjoyable Flighters (video)
- Extreme Heat
- Fantasy Date
- Henpecking (video)
- Hot Hungable Hunks
- Insatiable Woman
- La Traviata
- Men's Club (video)
- Movies For The Night
- Nature Bounty
- Obsessions
- Only 20
- Oriental v.1, v.2, v.3
- Petty Baby
- Pink Ladies
- Sakura I, II, III
- Sweet Summer Honeybee (video)
- Taboo 94' (video)
- Teenage Street Sluts
- World's Best Breasts
- World's Best Butts

MPEG Movie titles .... 10.95 ea.

- Beach Girls Sweet Summer
- Blue Berry (hooters)
- Deep Inside Linda Wang
- Happy Time Insatiable Woman
- Obsessions
- Pearl (china doll)

VIVID INTERACTIVE

Best of Vivid Girls	34.95
Hot Flots (game)	32.95
Virtual Vivid Sampler	7.95

All titles .... 23.95 each

- American Blonde
- Blind Spot
- Blonde Justice
- Blondage
- Channel Blonde
- Cheating
- Coven
- Girls of Vivid #1/ #2
- Girls Doing Girls #2
- Ice Women
- Immortal Desire
- Initimate Journey
- Love Bites
- Mystique of the Orient #2
- Mask
- Naked Reunion
- New Lover
- Parlor Games
- Poison
- Sex
- Steamy Windows
- Swap II
- Voice in My Bed

All titles .... 28.95 each

- 101 Sex Position #1 / #2
- Bustin Out
- Legend of Kama Sutra
- Mind Teazzer (brain puzzle game) #1 / #2
- Racquel Released
- Pleasure Zones
- Super Model Go Wild
- Winner Takes All

OTHERS

All Beauties v.1 / v.2	19.95 ea.
Amateur Models II	22.95
APL (adult picture library)	15.99
Asain Hot Pic's (GIF , PIC)	17.95
Barlow Affairs	29.95
Best of Best vol.1 - Erotic Encounters	25.95
Best of Best vol.2 - Girls on Girls	25.95
Best of Best vol.3 - Hot & Nasty Amateurs	25.95
Best of Best vol.4 - Deep Tush pt.2	25.95
Best of Best vol.5 - Candy Striper	25.95
Best of Digital xtc (interactive)	*(25.95)
Bobbitt Uncut (Movie)	26.95
Bodavious Beauties	29.95
Bone Alone / Born to Love	21.95/16.95
Busen (video-interactive) #1 / #2	26.95/26.95
Busty Babes #3	29.95
Buttman's European Vacation (PIXIS)	19.95
Centerfold & Covergirl (GVC)	25.95
Club 69	16.95
Club Syber Lesque (Virtual Reality game)	29.95
Collectible : Erotic Adv.	17.95
Cyber Peep (R-Rate, interactive)	18.95
Dangerous Blonds (GVC)	23.95
Daily Teasers / Digital Delight	21.95/15.95
Dirty Dual (Hot Pic's #1 + Asian Hot Pics)	22.95
Dirty Laundry	29.95
Erotic Dream I / II	27.95/27.95
Erotic Landscape (Players-interactive)	23.95
Exotic Poses 1 / Extreme Gall	21.95/16.95
Face (Xto-interactive)	27.95
Fantasies (interactive)	24.95
FAO (For Adult Only) #1 / #2 / #3	24.95 ea.
FAO Gold #1 / #2 / #3	32.95 ea.
FAO Platinum (GIF)	*(29.95)44.95
Fisherman's Wife	27.95
GIF keep on Gifing	19.95
Girls of Rising Sun / Girls of Spicy	11.95/26.95
Group Therapy (interactive)	27.95
Hollywood Biker Chicks (Players)	23.95
Hollywood Scandal	*(19.95)
Honey I Blew Everybody	21.95
Hot Pic's 2	21.95
House of Sleeping Beauty (PIXIS)	19.95
I Married an Anal Queen	21.95
Indiscretion (interactive)	27.95
Infomo / LA Stripper	28.95/28.95
Ladies Club Poker / Club Pool	27.95/27.95
Lost Empress (oriental treatment #3)	25.95
Main Street / Married Women	27.95/29.95
Massive Melons / Models Momoirs	25.95/19.95
Murphy's Brown	27.95
Naugty Butt Nice (interactive)	27.95
Neuro Dancer (interactive, PIXIS)	39.95
Oriental Babes / Passion Files	11.95/26.95
Penthouse Interactive #1/#2/#3	54.95 ea.
Pink Sheets	16.95
Pixis Erotic Sampler	6.95
Playboy Screen Saver : adult / mature	33.95/24.95
Pleasures (video-interactive)	26.95
Pleasure Island	16.95
Plumbers Don't Wear Tie (comedy)	17.95
Princess of Persia	29.95
Sex Therapy (interactive)	39.95
Scissors & Stone (interactive, PIXIS)	29.95
Secret Interactive / Seductions	29.95/24.95
Select the Pet (Penthouse)	29.95
Seymour Butts - Adventure (interactive)	39.95
Sexiest Women #1 / #2	21.95/25.95
Sinfully Yours (Xtc)	29.95
Sorority House (R-Rated Game)	39.95
Space Siren / Spring Break	39.95/21.95
Strip Poker (GIF)	23.95
Super Hormo Brothers	21.95
Swimsuit & Lingeria (2000+ GIFs)	9.95
T & A to the Maxx (GIF)	16.95
Temptation	*(12.95)
The Girls of Sunset (Players-interactive)	27.95
Things Change My First Time	23.95
Tokyo Night Life (XXX interactive)	*(29.95)
Touch Me, Feel Me	29.95
Treasure of Spicer Sampler	9.95
Vampire Kiss (interactive)	39.95
Virtual Director (XXX game)	39.95
Virtual Vixen (Pixis- interactive)	33.95
Virgins 1 / 2	35.95/35.95
Wander Lust (interactive)	32.95
Weekend At Ernies	29.95
Wicked Movie / Wicked Wiskers	*(29.95)/*(29.95)
Women of Beverly Hill (Players)	23.95
X Planet	22.95
XCD : Amorous Asian Girls	19.95
XCD : College Girls #2	22.95
XCD : Dark Tunnels	19.95
XCD : Nasty Neighbour Girls	22.95

2. PC SOFTWARE

ADOBE / ALDUS

Acrobat Exchange	*(139)
Illustrator 4.0 for Win	425
Pagemaker 5.0 for Win (w. fax Scan)	499
– upgrade	139
– w. MegaPack	*(525)
– Pagemaker + Photostyler 2.0	*(545)649
Persuasion 2.1 for Win	*(145)325
Photoshop 3.0 for Win oem	295
Photoshop 3.0 for Win & NT	585
Photostyler 2.0 for Win	355
Premier 4.0 for Win - FD+CD	329
Type Manager 3.0 for Win	45

AUTODESK

AutoCAD Lite	429
Autosketch 2.0 for Win	135
Generic CADD 6.1	69

BORLAND

Brief 3.1 for Dos & OS/2	95
C++ 4.5 - CD for Dos, Win, Win32	325
- upgrade - CD	189
Dashboard for Win + Sidekick	49
dBase V for Win / upgrade	329/*(125)
Delphi	195
Paradox 5.0 for Win / comp. upgrade	325/119
Power Pak for Dos	99
Sidekick / Sidekick 2 for Win	29/45
Turbo C++ 3.0 for Dos / for Win	75/79

CENTRAL POINT

More PC Tools for Win	54
PC Tools 2.0 for Win	89
PC Tools Pro 9.0 for Dos	*(79)

COREL

Corel Draw 3.0 - FD+CD	129
Corel Draw 4.0 - CD	*(249)355
- upgrade fr 3.0 to 4.0 - FD / CD	*(199/125)
Corel Draw 5.0 - FD+CD / CD	*(525/415)
- upgrade fr 3.0 to 5.0 - FD+CD	*(355)
- upgrade fr 3.0 to 5.0 - CD only	*(275)
- upgrade fr 4.0 to 5.0 - FD+CD	*(199)215
- upgrade fr 4.0 to 5.0 - CD only	*(165)
Corel Flow	*(59.95)
Corel Ventura 4.2 - FD+CD / CD only	175/139
Corel Ventura 5.0 - FD+CD / CD only	*(365/299)

IBM

OS/2 for Win - CD	*(19)
OS/2 3.0 Warp - CD / FD	74/76
OS/2 Warp + Dos & Win	118

INTUIT

Quicken Deluxe - CD '94 oem / '95	39/59
Quicken 4.0 for Win - FD / CD	39.95/36
Quickbook 3.0 for Win	95
QuickPay 3.0 for Win & Dos	49
QuickBook & QuickPay for Win	125

LOTUS

1-2-3 5.0 for Win / upgrade	*(279/89)
1-2-3 4.0 for Dos / upgrade	365/99
Ami Pro 3.1 for Win	*(99)259
Approach 3.0 for Win / w. 1-2-3 upgrd	99/145
cc:Mail Desktop 2.1 for Win	69
cc:Mail Desktop 10-user License	359
cc:Mail Group Pack for Win w. Organizer	595
cc:Mail Lan System 10 License	*(545)
cc:Mail Lan Trade-up 10 License (router)	375
cc:Mail Mobile E-Mail 2.0 for Win	135
- upgrade	75
cc:Mail Router 5.1	*(79)
Freelance Graphic 2.01 for Win	335
- upgrade for Win / for Dos	99/99
Notes Starter Pack 3.0	850
Organizer 1.1	95
Smart Suite 3.0 - FD / CD oem	495/*(199)
- upgrade	*(249)

MICROGRAFX

ABC Flowcharter 4.0	315
Designer Tech. 4.1	455
Graphics Works for Win - FD	85
Picture Publisher 5.0 for Win - CD	*(129)399
Windows Draw 3.0	49

MICROSOFT

Access 2.0 for Win / comp. upgrade	299/119
Arcade Games for Win	27
BOB (8 essential programs)	84.95
Creative Writer (age 8-14)	*(39.95)
Dos 6.22	42
- upgrade + Dos for dummies book	39.95
Excel 5.0 for Win oem / reg	134/*(285)
- competitive upgrade	119
Fine Artists (age 8-14)	*(39.95)
Flight Simulator 5.0	39.95
- Japan / New York / Paris / SF Scenery	28/28/28/25
Fortran 5.1 Compiler	155
Fortran Powerstation / upgrade	339/195
Fortran Powerstation 32	519
- upgrade to NT	275
Fox Pro 2.6 Single Dos or Win	*(95)
Fox Pro 2.6 Professional / upgrade	449/285
Macro Assembler 6.11 (MASM)	155
Mail Server 3.2 (10-user)	445
Multimedia Viewer - CD	315
Office 4.2 for Win - FD / CD	*(439)/459
- competitive upgrade - FD / CD	275/*(199)
Office Professional 4.3 - FD oem / reg	335/*(535)
- competitive upgrade - FD	*(345)
Office Prof. 4.3 + Bookshelf - CD	559
- competitive upgrade - CD	365
Power Point 4.0 / upgrade	315/125
Profit for Win	129
Project 4.0 for Win / upgrade	419/139
Publisher 2.0 for Win	89
Sound System 2.0 for Win - software only	49
Space Simulator	42
SQL NT Server 4.21 upgrade	139
Test 3.0 for Win / upgrade	569/185
True Type Font Pack #1 / #2	45/46
Visual Basic 3.0 for Win - Standard	129
Visual Basic Prof. 3.0 for Win - FD / CD	299/305
- competitive upgrade FD / CD	189/195
Visual C++ Standard	79
Visual C++ 2.0 for Windows NT (subsrcription)	469
- upgrade (get $50 rebate fr MS)	335
Visual C++ 2.0 for Win & NT (on-line doc.)	379
- upgrade (get $50 rebate fr MS)	239
Windows 3.11 / upgrade	51/49.95
Windows NT 3.5 Workstation - CD / FD	299/295
- upgrade fr v3.1 to v3.5	95
Windows NT Server 3.5	675
- upgrade fr NT Workstation (20-user)	145
- upgrade to NT Server 3.5 (250-user)	685
- competitive upgrade to NT Server 3.5	695
Windows for Workgroups (reg. version)	135
- oem version in 3.5" FD	57
- Workgroups Add On 3.11 for Win	*(35)49
- Workgroups Add On 3.11 MS-DOS	52
Word 6.0 for Win oem / reg	135/289
- competitive upgrade	119
Works 3.0 for Win oem / reg	59/89

NOVELL (WORDPERFECT)

Perfect Office 3.0 for Win	399
- Trade Up	219
Quattro Pro 6.0 for Win - CD	255
- upgrade / competitive trade-up	49/89.95
Wordperfect 5.2 for OS/2	*(99)
Wordperfect 6.0 for Dos (free upgrade)	*(259)
Wordperfect 6.1 for Win - FD / CD	245/255
- upgrade / trade-up	95/119

QUARTERDECK

Cleansweep	38
DesqView/X 2.0	169
DesqView/X Network Manager (TCP/IP)	129
Qemm 7.5 / upgrade	59.95/39

SANTA CRUZ OPERATION

software	call

SYMANTEC

ACTI 2.0 for Win	*(169)179
Norton Anti-Virus 3.0 ($50 rebate offer)	89
Norton Commander 4.0	69
Norton Desktop 3.0 for Win	112
Norton Speed Drive (speeds Win, Dos, CD)	69
Norton Utilities 8.0	109
On Target for Win (project planning)	89
PC Anywhere 5.0 Remote & Host for Dos	*(115)
- v2.0 for Win	*(117)125
Q & A for Win	159

OTHERS

After Dark III - FD / CD	29.95/39.95
By Design for Win	59
CAERE	
- Omni Page Direct OCR 2.0	65
- Omni Page Professional 5.0 for Win	445
– upgrade to 5.0 Prof.	139
- Omni Page 5.0 for Win	309
CA Clipper 5.2 / upgrade	479/115
CA Simply Accounting Dos / Win	69/69
Cakewalk Professional 3.0 for Win	235
Canvas for Win	265
- competitive trade-up	99
Carbon Copy 6.1 Guest & Host for Dos	105
Carbon Copy 2.5 for Win	*(115)
Check-It Plus 3.0	85
Check-It Pro Analyst for Win	*(49)
Check-It Pro vol.1 & vol.2	85
Check-It Pro Deluxe 2.0 for Dos	135
Claris Works for Win	*(49)69
DacEasy Accounting 5.0 for Dos	95
- v1.0 for Win	95
Delrina Dilbert screen saver	26
Desk to Desk (office network for 2 - 255 user)	72
Design CAD 2D 7.0 for Win	179
Direct Access 5.1 for Dos	65
Disney Screen Saver	27.95
Eclipse Fax 1.2 for Win / w. OCR	69/79
FastBack Plus 6.0 for Dos	119
File Maker Pro 2.1 for Win	*(89)115
Floor Plan Plus 3D competitive upgrade	47
Fractal Dabbler	55
Fractal Design Painter 3.0 for Win	315
- X2 for Win	88
FrameMaker 4.0 for Win - FD / CD	549/549
FTP: PC/TCP for Win	285
FTP: PC/TCP On-Net	345
Harvard Graphics 3.0 for Win / upgrade	275/95
Hijaak Graphics 3.0 for Win	89
Kai's Power Tools 2.0 for Win	115
Kid CAD - FD / CD	29/36
Kodak Photoedge CD	89
Kodak Shoebox Image for Win	*(95)
Laplink V	105
Laplink 6.0 for Win / upgrade	129/85
Lion King Screen Saver	16
Lords of Ring (bundle 1+2)	19.95
Mac-in-Dos for Win	89
Macromedia Director 4.0 for Win	795
Managing Your Money for Win	33.95
Math CAD 5.0 for Win	98
McAfee : Virus Scan 2.1 Dos	*(39.95)
- for Win	*(39.99)
Medical House Call (Applied Medical)	55
One Write Plus Accounting & Payroll	49
Passport Encore 3.0	365
Peach Tree Accounting 3.0 for Win	115
Peach Tree Accounting 8.0 Complete	185
Photo Morph 2.0 for Win	85
Power Japanese 2.0 for Win - FD / CD	175/179
Power Search (file manager)	*(25)39
Power Translator Deluxe (by Globalink)	115
Procomm Plus 2.1 for Dos / Win	89/126
QA Plus v4.8 for Dos / v6.0 for Win	59/59
Quark X Press 3.3 for Win	599
Qualitas 386 Max 7.0	*(59)
Sherlock for Win (filing & retrieval)	*(65)
Soft Windows (for Power Mac)	*(295)
Spanish Assistant (language translation)	46
SpinRite 3.1	79
Stacker 4.0 / upgrade	95/55
Stacker for OS/2	129
StageSoft Accounting w. Payroll	159
- Lan version	*(255)
Tie Fighter (game)	*(35)45
Uninstaller 2.0 for Win (microhelp)	42
- for Network 2.0	*(95)
Visio 3.0 for Win	*(125)
Visio Express for MS Office	49
Visio Technical 3.0	215
Watcom C++ v.10 16/32 bit	189
Wave 2.0 for Win (by Turtle Beach)	69
Win Check-It 2.0	46
Win Comm Pro	79
Winfax Pro + Win Comm Pro	124
Winfax Pro 4.0 / for Server	79/119
WinGuard Plus+ (data security Win & Dos)	39
WinLynx	*(39)79
WinSense 2.0 (windows optimizer)	39
Winsleuth Gold Plus	59
WinZones (Comprehensive Time)	19.95
Wordscan 3.0 (by Calera)	165
- Wordscan Plus 3.0	379
Wordstar 2.0 for Win	39
XTree Gold 3.0 for Dos	*(95)
XTree Gold 4.0 for Win	85

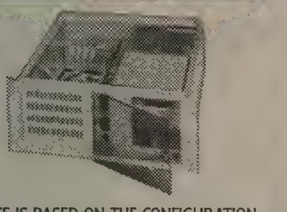
●

*(price) .... special, while supplies last

oem .... $ bundled with hareware only

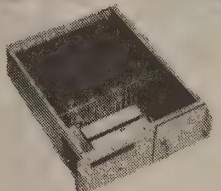
High Quality Industrial PC

19" Rack Mount System



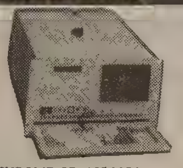
PRICE IS BASED ON THE CONFIGURATION YOU REQUIRE

19" Rack Mount Enclosure



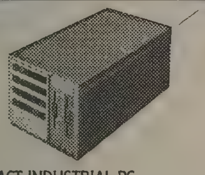
- 20 MODELS, UP TO 20 SLOTS
- UP TO 8 DRIVE BAYS

Rack System w/Keyboard and Monitor



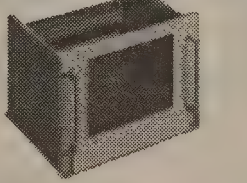
- MONOCHROME OR 10" VGA
- 10.5" X 19" X 24"
- MOTHER BOARD OR 8 SLOT PASSIVE BACKPLANE BOARD
- 5 HALF HEIGHT 5.25" BAYS

6-Slot Node IPC Enclosure



- COMPACT INDUSTRIAL PC
- WALL MOUNT PC CONTROLLER
- DRIVE HOUSING FITS 3.5" FDD & HDD
- 150W POWER SUPPLY

Monitor Enclosure



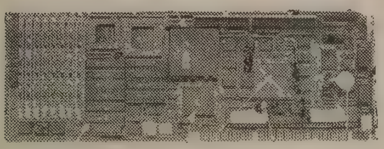
WE CARRY MONITOR ENCLOSURES FOR 14" & 17" MONITORS

Rack Mount
Keyboard w/Trackball

FULL TRAVEL KEYBOARD WITH TRACKBALL

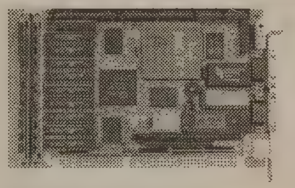
CPU BOARDS

All-In-One CPU Card



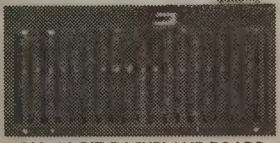
- 386DX-33 to 486DX4-100
- ISA, VESA
- 256KB Write back cache memory
- VGA Port on the board
- IDE HD/FD Controller 2S/1P, keyboard adapter on the board

Half-Size All-In-One 486 CPU



- 486SX-25 to 486DX33, 486DX2-50/66
- PC/104 Expansion Bus
- IDE HD/FD controller, 2S/1P, keyboard adapter on the board

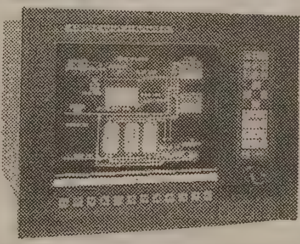
Backplane Board



ALL 16 BIT BACKPLANE BOARD
- 3, 4, 5, 6, 8, 12, 14, 18, 20 SLOT
- 14 SLOT SEGMENTED 6,4,4
- 18 SLOT SEGMENTED 5,4,4,5
- 20 SLOT SEGMENTED 5,5,5,5

Industrial Workstation w/Color TFT or CRT Display

- 9" TFT or 14" CRT color monitor
- Touch screen panel designed for easy touch operation (optional)
- Hard coating treatment of font panel meets NEMA 4/122
- 7/8 Slot PC/AT passive backplane
- Space for one 3.5" FDD & one 3.5" HDD
- 19" track or panel mount



J&K TECHNOLOGY

43224 Christy St., Fremont, CA 94538

Since 1989
510-226-9484 Fax: 510-226-9482
MON. - FRI. 8AM-6PM

YOUR AD COULD BE RIGHT HERE, GENERATING RESULTS. CHECK US OUT.

MicroTimes Classified Ads.

Call: (510) 934-3700

MICROTIMES

WE WON'T BE UNDERSOLD!
We Are Your Best Source For Components!

WE WILL TRADE YOUR OLD MEMORY FOR NEW!

SIMM MODULES
IBM COMPATIBLE

4M x 9-80/70/60	$135/139/140
1M x 9-10/80/70	31/37/39
1M x 9-60	40
1M x 3-80/70/60	35/37/39
1M x 3-60	40
256 x 9-10/80/70	7/10/12
256 x 9-60	13

APPLE/MAC MEMORY

1M x 8-10	$30
1M x 8-80	35
1M x 8-70	37
4M x 8-80/70	129/133

DRAM

1M x 1-80	$4.99
1M x 1-70	5.50
1M x 1-60	5.99
1M x 4-80/70	CALL
256K x 1-80	1.99
256K x 1-70	1.99
256K x 1-60	1.95
256K x 4-80	5.00
256K x 4-70	5.50
256K x 4-60	5.75

CPU'S- INTEL

PENTIUM P-100	$669
PENTIUM P-90	529
PENTIUM P-75	339
PENTIUM 66.	299
PENTIUM 60	259
486DX2-100	249
486DX2-66	179
486DX2-50	139
486DX-50	169
486DX-33	119
486DX-25	99

SUN MEMORY

SPARC SLC 4MB	$149
3/60,80,4/40,60,65	
4/16MB	149/549
SPARC 1 & 1+,1PC	
4/16 MB	149/549
SPARC 10 16/64 MB	699/CALL
SUN CLASSIC 16 MB	699
SPARC SERVER 630NP 64MB	CALL
SPARC IPX, ELC 4/16 MB	179/699
SPARC II 16 MB	669

CACHE MEMORY

32 x 8-25/20	$5.50/5.80
32 x 8-15	6.50
64 x 4-20/15	2.75/3.15
128 x 8-20/25	23/21

72 PIN SIMMS

2 MB 60-4/80/70	$69/79
4 MB 1x36-80	145
4 MB 1x36 70/60	153/155
8 MB 2x36-70/60	509/519
16 MB 4x32-70/60	489/499

ZIPPS

1 x 4-80 20 Pins	$23
1 x 4-70	25
LASER PRINTER MEMORY	CALL
IBM PS/1 or PS/2 MEMORY	CALL

INTERNATIONAL
Module Design, Inc.
2229 RINGWOOD AVE., SAN JOSE, CA 95131
(408) 577-1100 Fax: (408) 577-1300
Same Day Shipping Prices Subject To Change W/O Notice

MultiMedia & BEYOND

For the latest **CD-ROM** and software news & reviews, see our **Product Spotlight** section starting on **page 208**

In This Section:

- **Gulch Gossip** 266
- **Multimedia 101 Is It Pop? Or Is It Poop?** Multimedia And The Music Biz 276
- **Creative Control With Bryce And Convolver** 280
- **Amiga** New Products And Rumors...290

Gulch Gossip

by Jonathan E.

Multimedia Live!

When I suggested a couple of years ago that multimedia might be successful as a live event before being something for home consumption, I had something a little flashier in mind than large-screen projections of beta-version CD-ROMs to an industry crowd. But that's what Multimedia Live! at the Palace of Fine Arts Theater turned out to be.

It was rumored to be theoretically sold out, although there were quite a number of empty seats inside—a number that increased as the evening wore on. I noticed plenty of uncollected passes at the press table as the show started, so perhaps that explains the ready availability of space.

What surprised me about the evening was that I thought there were no real turkeys in the way of titles. It's a rule for me never to draw firm conclusions about a title based on a demo, and to remember that, while a presentation is designed to give a favorable impression, it can often get in the way of such an impression rather than aid it. Indeed, some individuals left the auditorium mouthing deprecating comments about too many sales pitches and what a waste of a computer to have to show that kind of stuff anyway. But my overall reactions were positive—in fact, I worry that I'm losing my critical teeth. Please just remember that these are not firm conclusions.

The show opened hilariously with computer-generated graphics that had lost their soundtrack, leading first to a stunned audience silence and then the wisecrack catcall of "Sound is the orphan child of multimedia." This is, of course, one of **Marc Canter**'s soundbytes but, in this case (and you'll find out why later), I believe he was sampled. After the laughter had died down **Erik Holsinger** made a masterful and very funny recovery in his role as MC and got things underway.

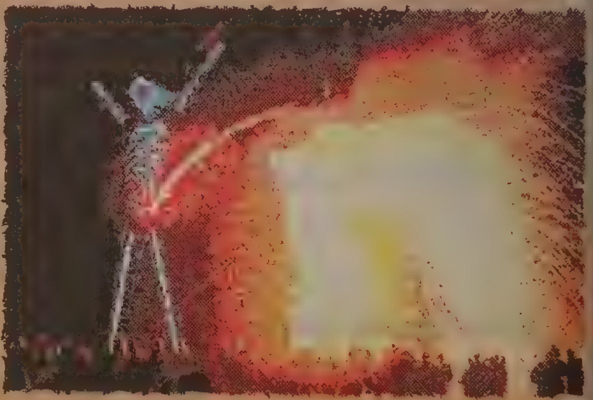
Jim Baker's presentation of 21st Century Media's *Singletrak Mind* took me back to my own English schooldays with Jim's British accent and his studious step-by-step report on the product's desirable features and how highly he rated their success—not to mention the subject matter, riding bikes as fast as you can cross-country. Okay, so the presentation was a bit pedantic, and there are plenty of folks who think that a CD-ROM title about mountain bik-

Burn That Man

No doubt many readers of this column will be interested to know that registration packets for the *Burning Man* event are only $25 until May 31. Afterwards they go up to $35.

This year it runs Thursday, August 31 through Monday, September 4 at Nevada's Black Rock Desert. There'll also be an interactive art environment evoking the Black Rock experience at the SOMAR Gallery, 934 Brannan St., San Francisco, during the first two weekends of August.

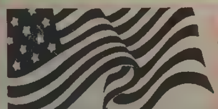
The gallery, hall, and theater of the South of Market Cultural Center will be filled with fire, dance, music, computer art, monumental sculpture, interactive performances, and of course, the Burning Man. Tons more information, including photos and videos, may be had from the Man's Web site, *http://www.well.com/www/tcircus/Burnman* . If you just want to send in your money without waiting for the server to grind through its cycles, do so to Burning Man Project, P.O. Box 420572, San Francisco, CA 94142. T-shirts and videos are also available. Anyone interested in volunteering, and lots of volunteers are needed, should call the hotline at (415)985-7471.



Perfect Solution Multimedia, Inc.

DBA PS Computer Serving You Since 1989

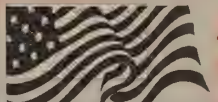
The Latest In Multimedia On Display!
Let Us Repair or Upgrade Your System!



ASUS Pentium PCI/ISA
Intel Triton Chipset
256K, 16MB, 1GB, 17" Impression 7

- ASUS PCI Motherboard
- **256K** Ext. Cache & CPU Cooling Fan
- **16MB** RAM (Max 128MB)
- 1.2 MB & 1.44 MB Floppy Drive
- **1.2GB Conner** IDE Hard Drive
- Enhanced PCI HD Controller w/High Speed I/O
- 2MB **Diamond Stealth 64** PCI Graphic Card
- Medium Tower Case with 2 Cooling Fans
- 101 Keyboard (Keytronic or Focus 2001 Click)
- MicroSoft Mouse or Logitech Mouseman
- 17" Impression 7 1280x1026 .26 MPR-2 Green Monitor
- 7 Year Labor Warranty, 1 Year Parts Warranty

100MHz $2989
90MHz $2829
75MHz $2619



ASUS Pentium PCI/ISA
Intel Triton Chipset
256K, 16MB, 1GB
15" OptiQuest 2000D

- ASUS PCI Motherboard
- **256K** Ext. Cache & CPU Cooling Fan
- **8MB** RAM (Max 128MB)
- 1.2 MB & 1.44 MB Floppy Drive
- **540MB Quantum** Hard Drive
- Enhanced PCI HD Controller w/High Speed IO
- 1MB S3-864 PCI Graphic Card
- Medium Tower Case with 2 Cooling Fans
- 101 Keyboard (Keytronic or Focus 2001 Click)
- MicroSoft Mouse or Logitech Mouseman
- 15" Optiquest 2000D 1024x768 .28 MPR-2, digital, Green Monitor
- 7 Year Labor Warranty, 1 Year Parts Warranty

100MHz $2239
90MHz $2079
75MHz $1869

Multimedia Upgrade w/System Purchase

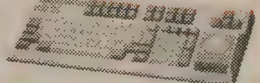
Sound Blaster 16 Sound Card
Sony IDE 2X CD-ROM
80 Watt Speakers
Compton's Interactive Encyclopedia
$234

Sound Blaster 16 Sound Card
Teac 4X CD-ROM
80 Watt Speakers
Compton's Interactive Encyclopedia
$294

PS CD Title $9.95

The Perfect Gift
Enhanced Keyboard w/Built-in Trackball

- Enhanced 122 Key Keyboard
- Built-in Trackball



$55

Microstar PCI Local Bus
256K, 8MB, 540MB, SVGA NI

- **Microstar** PCI Motherboard
- **8MB RAM** 70ns, 72pin, Exp to 128MB
- 540MB Quantum Hard Drive
- 1.2MB 5.25" and 1.44MB 3.5" Floppy Drives
- Enhanced PCI Controller
- 2 Serial, 1 Parallel, and 1 Game Ports
- 1MB S3-864 **64 Bit** PCI Graphics Card
- Medium Tower w/Power Supply
- 101 Enhanced Keytronic or Focus 2001 Click Keyboard
- MicroSoft Mouse or Logitech Mouseman
- 14" Proton 1024x768, .28 SVGA Non-Int Full Screen Monitor w/72Hz Refresh Rate
- CPU Cooling Fan
- 7 Year Labor Warranty, 1 Year Parts Warranty

Intel 486DX4 100MHz $1405
Intel 486DX2-66 MHz $1325
AMD 486DX4 100 MHz $1335
AMD 486DX2 66 MHz $1275

486 VESA 128K
4MB, 420MB, SVGA NI

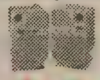
- 4MB RAM (70ns) exp. to 32MB
- 420MB Quantum Hard Drive
- 1.2MB 5.25" and 1.44MB 3.5" Floppy Drive
- 32-Bit IDE VESA LB Controller (Supports 4 IDE Drives)
- 2 Serial, 1 Parallel, and 1 Game Ports
- 1MB 32-Bit Trident 9440 VESA LB SVGA Card w/Windows Accelerator
- Mini Tower or Desktop Case w/ Power Supply
- 101 Mitsumi Enhanced Keyboard
- Logitech Dexxa Mouse
- 14" Proton 1024x768 .28 SVGA Non-Int Full Screen Monitor w/72Hz refresh rate
- CPU Cooling Fan
- 7 Year Labor Warranty, 1 Year Parts Warranty

Intel 486DX4 100MHz $1154
Intel 486DX2-66MHz $1064
AMD 486DX4 100MHz $1074
AMD 486DX2 66MHz $1014

SONY 55E
IDE 2X CD ROM Drive
250MS, 300KB/SEC
$119

TEAC
IDE 4X CD ROM Drive
$179

80W Speakers
Magnetically Shielded

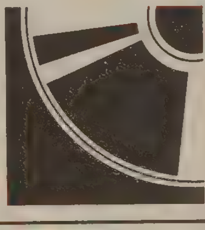


$49

Make Your Own CD

You bring in the data and we do it all

- Up to 650MB of disk memory
- Complete professional output
- Additional CD services available
- One Day Turnaround!



Special
500 CDs–$4.00 each!

We Produce CD Titles!

More than 200 Kinds of CDs in Demo
Distributors or OEM are Welcome

CONTROLLERS

IDE w/IO (Winbond Chipset)	$15
IDE/IO VLB (Winboard, 4HDD)	25
Enhanced IDE VLB w/High Speed IO	39
Promise CD4030VL2 IDE VL Cache Controller	105

SOUND CARDS

Sound Blaster 16	$79
Sound Blaster 16 w/SCSI-2	105
Sound Blaster Compatible	39

FAX MODEM (Rockwell Chipset)

14,400 Fax Modem	$59
14,400 Fax Modem w/Voice	74
14,400 Fax modem (ext.)	79
28,800 Modem/14,400 Fax w/V.34	139
28,800 Modem/14,400 Fax w/V.34, ext	175

CASE & POWER SUPPLY

Mini Tower w/230W	$39
Medium Tower w/230W	59
Full Tower w/250W	79
Full Tower w/300W	119
Desktop Case w/230W	48
230W PS	29
300W PS	69
Power Center w/Green Function Control	45
IDE HD Removable Kit	35

MOUSES

Logitech Mouseman (Bus)	$55
Logitech Mouseman (PS2)	55
Logitech Trackman Combo	69
Logitech Dexxa Serial	15
Microsoft Ergonomic Serial	29
Big Ball Trackball	25

OPERATING SYSTEM (w/System Purchase)

DOS 6.22/Window 3.11	$40/49
DOS 6.22 & WFWG 3.11	99

DISPLAY CARDS

1MB Trident	$62
1MB Trident VLB Windows Accelerator	80
1MB S3-864 PCI 64 Bit	109

SVGA NON-INTERLACED MONITORS (Green)

14" Proton 1024x768 .28	$234
15" OptiQuest 2000D 1024x768 .28 MPR-2, Digital, Green Monitor	379
17" Impression 7 1280x1024 .26	599

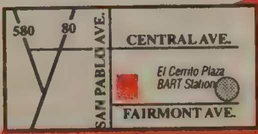
DRIVES

Teac 1.2MB/1.44MB	$47/37
Safronic 1.2MB/1.44MB	46/36

PRINTERS

HP 540 InkJet w/Cable	$299
High Capacity Ink Refill Kit	25

10032 San Pablo Ave.
El Cerrito, CA 94530
TEL. (510) 527-6908



VISA
COD
MasterCard

OPEN 6 DAYS
Mon-Sat: 9:30am to 6pm
FAX (510) 527-3823

You Can Count on Our Best Price and Qualified Service! • 7 Years Labor & 1 Year Parts Warranty!

ing is a pretty ludicrous concept, but I rather enjoyed it. There's a simple reason; I loved biking, but after far too many spills I prefer to see younger people do the hard-core crashes. The same sort of sentiment is true for the other titles on extreme sports that 21st Century Media intends to make.

There's a more serious reason, too, and that is the random access possible with digital media can help one learn techniques relatively easily by repeatedly viewing small parts of video clips or whatever other instructional material is presented. However, it must be said that what eventually engaged the crowd was a series of spectacular crashes (of bikes, not the system)—this was a convincing demonstration of one of the advantages of virtuality. Since then, I've received a "Press Preview" Gold Master copy of *Singletrak Mind*, and frankly I hope that 21st Century Media is planning to do a fair bit more work before trying to convince the public to buy it.

Andrew Lau was up next with *Wild Cards*, Corel's first entry into the "entertainment" market. Talk about the ultimate electronic babysitter! Talk about teaching kids values! This CD-ROM is a collection of seven card games, including "Twenty-One," for children between about six and twelve (I'd guess; Corel says "four to ten"). It looked like it could keep them (and some adults) endlessly entertained—and not entirely mindlessly either; after all, card playing can be good preparation for a career in Reno.

This Month's Morph

The upshot of the past two month's notes about turmoil at *Morph's Outpost on the Digital Frontier* is that *Morph's* is "moving away" from its association with *Blaster*, the screenager's publication. This is a literal moving, as in new office. While it seems more usual for the kids to leave the house, hopefully this will allow Morph to get on with his life.

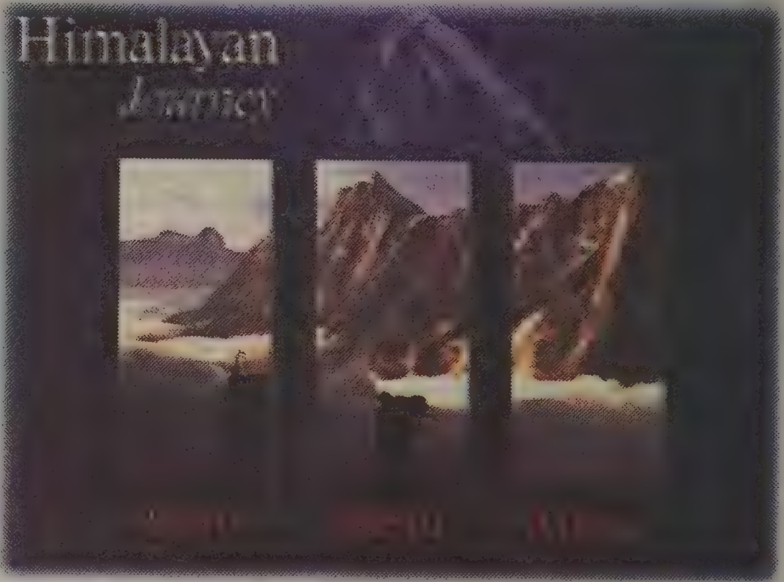
There are some other amusing painting and video facets to *Wild Cards*—I want one for myself! The only thing I didn't like was that you always seemed to come back to a screen where some wacky character says, "What game do you want to play?" rather than reacting to what's happened by saying something more like, "You beat the pants off me. Loan me a fin."

Tony Bove received initially a rather frosty reception for his *Haight-Ashbury in the Sixties*, but by the end had the audience eating out of his hand when he had convinced many that there was indeed fun to be had in the hippie era. Tony's been around the multimedia scene longer than most; the title looks good and there's certainly some good content—let's hope that Compton's don't drop the ball or too much acid. I'm hoping that this will be the subject of a future Multimedia 101 column.

Did I say something about "no real turkeys"? *Blockbuster Video Guide to Movies & Videos* came close. I remember now because I recall almost nothing about the title except that it didn't seem to have much video (and what's a multimedia film guide without footage?) and I was more intrigued by what the team of three presenters said about Blockbuster's market research and the fabulous numbers Blockbuster does! I might be an old analog cynic, but what's the big deal? Go to the store, browse the shelves, read the blurbs, spend the big three bucks! Don't like the movie—so watch TV, read a book, or go to bed! So eventually there'll be monthly online updates with fifty to one hundred new movie reviews each month. Now I'm impressed, this is pushing at the limits of new media, something you could never do in the olde world.

IBM did something that wouldn't have happened in the olde world. The presentation started by ridiculing the corporation with a slide show of a printed report. Luckily, the theatrical personage of **Hyperman** soon burst onto the stage and we were able to learn how a catapult works for lobbing igneous material over a besieged castle's walls. Something every twenty-first century kid is going to have to learn after the gleaming future fails to arrive on schedule and we're left closer to **Mad Max** than any nicely paved section of highway. Of course, I'm being flippant—if IBM acts that way, I thought it was okay. *The Adventures of Hyperman* actually seems as though it could introduce kids to some worthwhile concepts.

After the intermission, Multimedia Live!'s graphics were shown again, this time with sound, and a couple of awards were doled out, thankfully only a minor part of the evening.



A. **Kamrun Noor** of Simulations next demonstrated *Himalayan Journey*. This title is still in a very early stage—but it looks spectacular and seemed to have some very innovative features. If all goes well, I could see this becoming a major success—and Simulations was still looking for a publisher. They're based in Tiburon; call (415)435-8272 to talk direct.

Spin This

Barbara Mehlman, who may be remembered by longtime readers (or students) for her Artitorials class at SF State, is working on a CD-ROM project for **Greg Kihn**, whom Berzerkeley rockers will surely remember. The production company is called Spin Interactive, headed by **Irene Graff**, and Rhino will be the distributor.

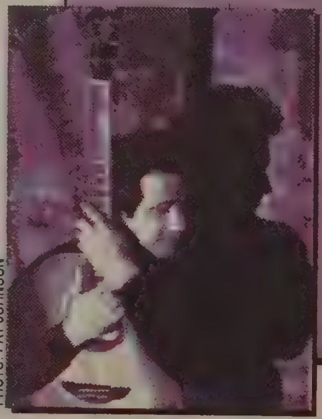
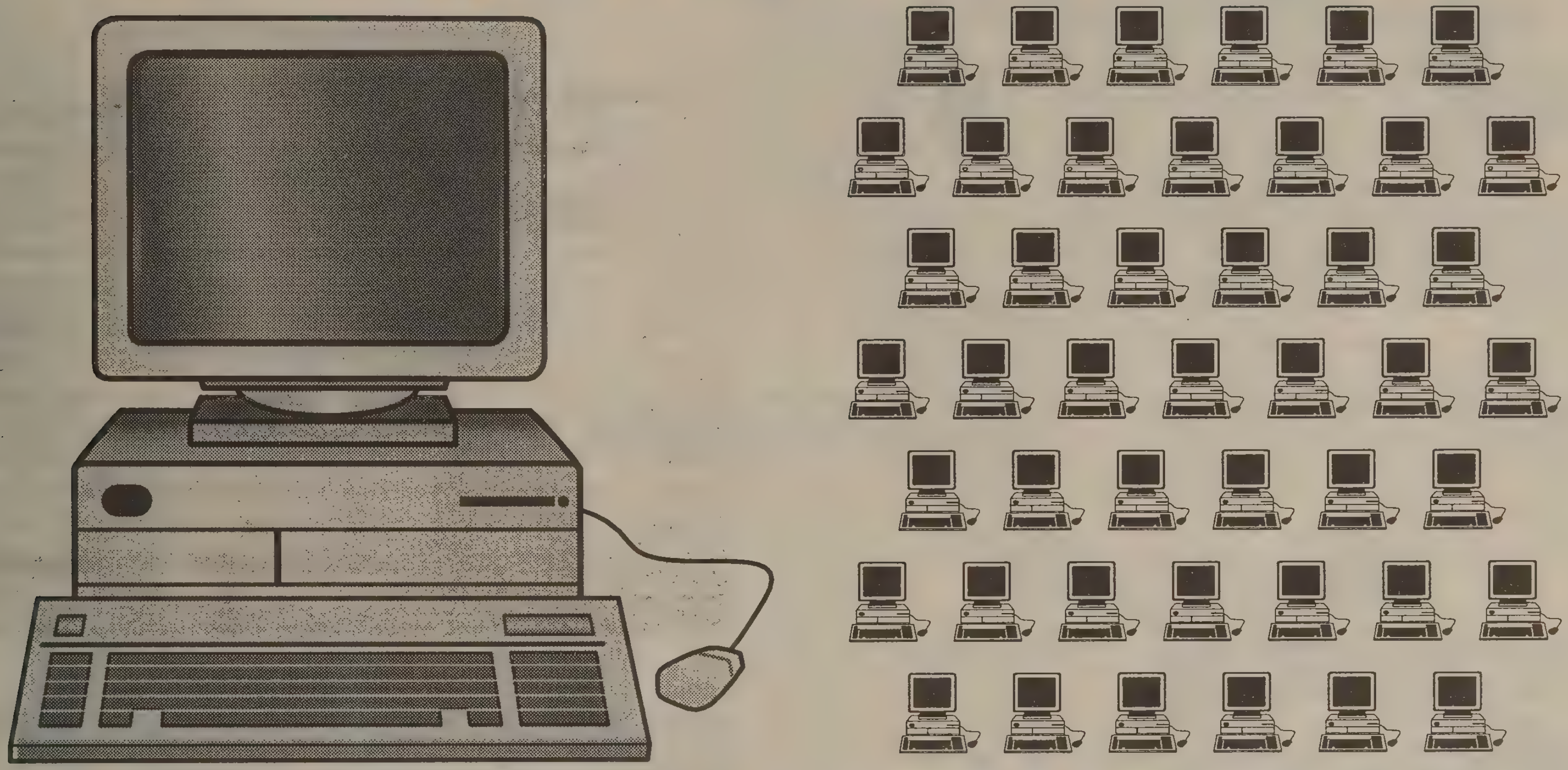


PHOTO: PAT JOHNSON

One Computer or One Hundred...



We Keep You Working

ATS

Internet Access Solutions	Network Consultation	Remote LAN Access	Branch Office Internetworking	Support, Installation, & Service

ATS has the experience *and* the expertise to handle your network requirements.

Whether you're running one small office with one micro computer, or a statewide network of offices with a complex inventory of computers, you simply cannot afford "down time."

Call **ATS** today to find out just how easy it is to stay productive with current solutions.

ATS 1-800-969-4287
(4ATS)

ATS Sales/Service Centers:
Los Angeles (310) 839-0020
Oakland (510) 638-4449

Have your 35mm color or black & white negatives or slides, transferred into a Photo CD!

Now offering writable CD-ROM services from PC Files

Photo CD TM

RATES & SERVICES

35mm Process and transfer to CD
(Price includes Photo CD Image Directory, CD and case.)

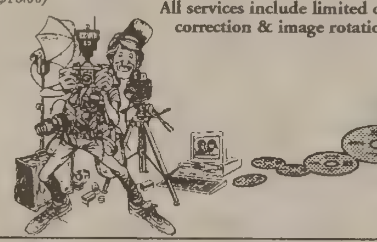
Color Development	$3.00 Roll
B&W Development	$5.00 Roll
4x6 Color Prints (Matte Surface)	$.38 Each
Image Transfer *(Minimum order of $13.00)*	$.89 Each
Slide Development 24 Exp.	$5.95 Roll
Slide Development 36 Exp.	$7.95 Roll
Image Transfer *(Minimum order of $16.00)*	$.89 Each

35mm Negative or slide image transfer to CD
(Previously processed. Minimum order $21.00)

12-24 Images	$1.79 Each
25-49 Images	$1.69 Each
50-74 Images	$1.59 Each
75+ Images	$1.49 Each
150+ Images	$1.39 Each
500+ Images	$1.29 Each
1000+ Images	$1.19 Each

(Single CUT Negatives: Add $1.00 per negative)

All services include limited color correction & image rotation!



WE PROVIDE SPEEDY SERVICE & MORE.
- 2 Day Fast Turnaround (Working Days)
- Ship us your order & we'll ship it back for free

ITS•CD IMAGE TRANSFER SYSTEM

ITS CD
Tel: 415-668-4688 • Fax: 415-668-4689
1845 Haight Street • San Francisco, CA 94117
(Next to Photo Motion, near Stanyan St.)
Hours: 10AM to 7PM Daily

Kodak Photo CD TM

PROFESSIONAL SCANNER HAS ARRIVED!

MEDIUM/LARGE FORMAT

- 4 x 5 – 2 ¼ – 35 mm
- Six levels of resolution
- File size up to 72 MB, 30-35 Image Pacs per CD-ROM
- Up to 4,000 x 6,000 pixels
- Storage cost 3 cents per MB*
- Compare with SyQuest storage cost of more than $1 per MB

*CD-ROM included with 10 or more scans

ALPHA CD IMAGING
675 Menlo Avenue
Menlo Park, CA 94025-4700
Call: 1-800-453-2988 or 415-325-4877
Fax: 415-325-4911

Photo CD TM

MarketPro Hrs. 10 am - 5 pm

COMPUTER Show & Sale

Sat. May 6 - VALLEJO
Solano Co. Fairgrounds

Sun. May 7 - SANTA ROSA
Sonoma Co. Fairgrounds

May 13 & 14 - SACRAMENTO
Cal Expo 2 days ★

Sat. May 20 - FRESNO
Fresno Fairgrounds

Sun. May 21 - STOCKTON
Civic Auditorium

Sun. May 21 - SAN RAFAEL
Embassy Suites

Sat. May 27 - VALLEJO
Solano Co. Fairgrounds

Sun. May 28 - SACRAMENTO
Scottish Rite Center

MarketPro (415) 456-6730

$1 OFF Adm. With AD
Reg. Adm. $6
FREE with MarketPro Membership

SAVE UP TO 90% Hardware · Software · Peripherals

GULCH GOSSIP *continued...*

Next we were treated to virtual history in the form of Compton's *ReElect JFK*. There was some interesting content and gameplay. The idea is that JFK survives the assassination attempt and seeks reelection in 1964, all the while looking for his would-be killers and dealing with the civil rights campaign in the South and the Vietnam War. It seemed as though this title could really intrigue someone into this kind of historical roleplaying, but I found it slow and clunky to look at—very low on the eye candy meter.

The evening closed with *Aliens* from Mindscape. It looked fantastic, very dark and mysterious with unusual effects, and based on some elaborately huge science-fiction concept, far larger than the well-known movie. The lights came up; it was apparent that a large proportion of the crowd had already been abducted—by aliens? Who knows? Perhaps they merely absconded and will reappear at the next industry event. The offer of a Q&A session was politely declined—now, that's interactivity!

She Went Thatta Way!

Nina Davis moves up from marketing and publicity to an editorial position at *Red Herring*, the savvy multimedia investor's magazine of choice.

And She Went Thatta Way!

Kandy Arnold resigned the editorship of *Multimedia Producer* after frequent promises to find her an assistant went unfulfilled.

WILL MAKE CD-ROMS FOR FOOD

Sad to say but it looks as though *Substance.digizine* crashed and burned as its second issue hit the newsstands—or whereever it's supposedly sold; the distribution appeared to be extremely spotty, with a run of only four thousand copies. With as much publicity as *Substance* received, you'd think they might sell that many in the Bay Area alone. A couple of the principals are trying to figure out a way to save it, but it seems that many of the crew just couldn't hack it on idealism alone any longer.

KIWI QT

Peter Spreenberg, interactive designer with Ideo, and **Angels Bronsoms**, all-round Catalan connector of the Bay Area with Barcelona, are taking the work of Bay Area multimedia artists to New Zealand through a project called Bay Area Art Grooviness and Technology.

Starting in April by selecting who is to be in the project, the plans call for eventually compiling a library of artists, creating a digital map or interface (possibly using QuickTimeVR), and touring their work in New Zealand,

November 1993

February 1994

January 1994

intel inside
WINDOWS
WINDOWS
MS-DOS
NetWare

"Reasonable performers geared toward business users..."
PC MAGAZINE, December 6, 1994

"Basic Pentium-66 at a great price. It's also on the Budget Top 20..."
PC WORLD, November 1994

"Service and Support are decent, with responsive, accurate tech support..." **PC WORLD, February 1994**

"The NETiS N4D266V's fine performance, low price, and super support make it the hands-down winner for top overall Best-Buy"
PC WORLD, January 1994

"The Best Buy system from NETiS Technology represents a remarkable combination of low price and high performance."
PC WORLD, November 1993

PCI PowerStations

Advanced PCI Local Bus Motherboard
4 PCI Local Bus Slots and 5 ISA Slots
8MB Memory, 256K Cache, ZIF Socket
420MB Enhanced IDE HD w/ PCI Controller
Both 1.2MB & 1.44MB TEAC Floppy Drives
Diamond Stealth 64 PCI Graphics **w/1MB**
15" Non-interlaced .28mm SVGA Color Monitor with LCD Display (1280x1024)
2 Serial/1 Parallel/1 Game Port
Logitech 2-button Mouse w/Pad
MaxiSwitch NOVA 101 Keyboard
Desktop Case with Power Supply

586-66/75	**$ 1,575/$1,640**
586-90/100	**$ 1,825/$2,039**
486DX2-66	**$ 1,449**
486DX4-100	**$ 1,515**

NETiS 486 Multi Media

486 CPU with ZIF Socket
4MB Memory, 128KB Cache
3 VL-Bus (VESA Local Bus) Slots
270MB Hard Drive w/VLB controller
1.44MB TEAC Floppy Drive
VL-Bus Graphics with 1MB
14" non-interlaced SVGA Monitor, .28mm
2 Serial/1 Parallel/1 Game Port
Double speed CD-ROM
16-bit sound card and speakers
Logitech 2-button Mouse w/Pad
MaxiSwitch NOVA 101 Keybaord
Desktop Case with Power Supply

On-Site Service Available

486DX-33	**$1,099**
486DX2-66	**$1,125**
486DX4-100	**$1,195**

Compaq Computers

Contura Aero 486SX/33 C170,4MB,Mono	$1,675
LTE ELITE 486DX2/40 CX170,4MB,Color	$2,845
ProLinea MT 486DX2/50,4MB,340MB HD	$1,430
DeskPro XL Pentium-66,16MB,535MB HD	$3,895
Multiprocessor computers	**CALL**

IBM Computers

ThinkPads/Notebooks:

486SX-33,4MB,170MB,Mono	$1838
486DX2-50,4MB,340MB HD, Dual scan	$2,838
486DX4-75,4MB,540MB HD, Color	$4,928
PC series/ValuePoint	**CALL**

Novell NetWare

3.12 5-user/10-user	$595/1,345
3.12 25-user/50-user	$1,925/$2,650
3.12 100-user/250-user	$3,695/$6,590
4.1 5-user/10-user	$698/$1,595
4.1 25-user/50 user	$2,260/$2,858

ONE STOP SHOPPING FOR OPTIMAL NETWORK SOLUTIONS

- Networking Hardware/Software
- Network Design, Installation & Training
- Turnkey Solution/System Integration
- **Internet** Connectivity Solution
- Top-Notch Expertise/Support in Novell Netware, UnixWare, Windows NT, SCO UNIX/ODT, Solaris, Lantastic & TCP/IP Networking

Novell Gold Authorized Reseller

File/Print Server
NetWare/UNIX Connectivity
Internet E-Mail Gateway
Network Backup Server
FAX Server
CD-ROM Server
Dial-in/Dial-out/Modem Server
Storage Subsystems

We Offer Complete
ISDN **Plug & Play Solution**

NETWORK SPECIAL

16-bit Ethernet (BNC or 10BaseT)	$35
16-bit Combo Ethernet Card	$42
3COM/Intel/Novell/SMC Ethernet	CALL
9-port 10BaseT Ethernet Hub	$140
12-port 10BaseT Ethernet Hub	$230

NETiS™ Technology Inc.

Available and Ready for OS/2

HEWLETT PACKARD
VAR RESELLER

IBM
VAE RESELLER

NEC
AUTHORIZED RESELLER

COMPAQ
AUTHORIZED DEALER

MICROSOFT WINDOWS NT

1606 Centre Pointe Drive • Milpitas • CA 95035 • Telephone 408.263.0368 • Fascimile 408.263.4624

408.263.0368

Email: sales@netistech.com
Fax ***408.263.4624***

Business Hours:
Monday-Friday 8am-6pm PST
Saturday 10am-4pm PST

Price,Term,Specification,Availability subject to change without notice. Not responsible to typographical errors. Prices reflect Cash discount. 48-Hours system burn-in. Registered Trademarks are Trademarks of their respective owners.

GULCH GOSSIP *continued...*

both through the Internet and in the real towns of Auckland, Wellington, and Christchurch, all of which will hopefully lead to future collaborations.

The money for the work was put up by a group of New Zealanders. Angels says she's looking for both established and emerging artists; if you fit either of those categories and wish to have your art seen in New Zealand, call her at (415)642-1242.

IS IT CONVERGENCE? OR IS IT CONFUSION?

That nice wholesome bunch, the **Bradys**, the ones with their own cult following, having eaten Hollywood for lunch, will soon converge the TV onto the PC a bit more. But is it a snack or is it dinner?

Paniagua Productions, Inc. has the license from Viacom Consumer Productions to produce “a family of home learningware products

Megalomedia Marc

The same night as Multimedia Live!, across the Bay at the Thursday night BMUG meeting, **Marc Canter** reportedly was royally roasted for daring to bring his version of cultural entertainment to the computer world.

Pretty ironic and fairly amusing if you ask me—but I don't know how some nineteen-year-old, lip-pierced type (and white) hopes to get away with calling Canter a racist for using elements of black music in *Meet MediaBand*. Maybe this guy just hasn't paid attention to the magpie tendencies of Afro-American music itself over the past fifteen years or so. Marc himself says, “My parents were active in the civil rights movement, I grew up in South Side Chicago, no one calls me racist.”

But he will admit to being a megalomaniac! Canter is getting together with **Norman Sheffield** and **Charles Levison**, two very heavyweight English-music business guys, to build his “worldwide virtual-corporation empire of media bars.” Sheffield had a hand in the early careers of Queen and Genesis, along with work with the Beatles and David Bowie; he was behind Trident Studios (an extremely successful studio in London), and did a lot of multimedia type things, such as the first video promos for musicians and using a satelite uplink in the early '70s for transatlantic work.

Marc explains, “He's got all this experience, so he'll be my right-hand guy, my bulldog. He'll do the business plan.” Levison is a lawyer who's previously done legal work for **Chris Blackwell** of Island and **Richard Branson** of Virgin. Canter says, “He's used to working with megalomaniacs and both I and Norm are megalos.”

Motherboards

Intel Premiere/PCI II (Neptune)	
Pentium PCI 100 w /PCI-IDE 256K	$ 310
Pentium PCI 75/90 w/PCI-IDE 256K	$ 285
ASUS	
Pentium 90 / 100 PCI / ISA 512K	$ 248
486 DX4 / 100 PCI/VLB 256K	$ 145
486 DX4 / 100 VLB 256K	$ 120
Others	
Pentium 100/90/75 w/IDE-IO 256K (Intel Neptune Chipset)	$ 200
Pentium 90 / 100 PCI / ISA 256K	$ 140
Pentium 60 / 66 PCI / ISA 256K	$ 125
486 DX4/100 PCI / VLB 256K	$ 105
486DX4 / 100 3-VLB 256K	$ 88

Video Cards

Diamond Stealth64	
1MB/2MB DRAM PCI/VLB	$ 110/154
2MB/4MB VRAM PCI/VLB	$ 257/385
ATI	
Graphics Ultra Pro 2MB PCI/VLB	$205
Graphics Wonder 1MB ISA/VLB	$ 87
Expression 64 2MB DRAM VLB/PCI	$167
Orchid Kelvin 64	
1MB/2MB PCI/VLB	$ 112/ 160
Trident 9440 1MB PCI	$ 65
C&T VLB-SVGA 1MB	$ 63

Hard Drives

Quantum	540MB 12ms IDE	$ 170
	730MB IDE	$ 225
Conner	540MB 14ms IDE	$ 169
	420MB 12ms IDE	$ 158
Maxtor	540MB 12ms IDE	$ 167

"Special" Pentium System

- Pentium PCI w/256K.
- **Pentium CPU w/fan.**
- **8MB RAM-72Pin.**
- Teac 1.44 Floppy Drive.
- Conner **540MB** Hard Drive.
- **Enhanced** PCI IDE Controller.
- High Speed IO.
- **Trident 9440 PCI w/1MB**
- 14" NI SVGA Monitor .28
- Keytronic-101 Keyboard
- Delux Mid-Tower Case w/230PS.

Intel P5-100 $1669

Intel P5-75..................$1349

Intel P5-90..................$1499

Add
- Sony 2-Speed CD-ROM
- SoundBlaster 16 Value

$179

TeleFOD :Fax-On-Demand & Voice Processing

Package Include:

1). Voice Processing Platform.
2). Fax Processor Card.
3). Voice/Fax Processing Software.
4). Operation Menu.
5). Free Installtion and Setup.

Price
Start From $ 725

Product Features:

1)Interactive Voice Response.
2)Unlimited Audiotext.
3)Voice Messaging Control.
4)Advanced Fax-on-demand.
5)Call Screening.
6)Multiple Language.
7)Multiple ID/Password/Credit.
8.)One Call'&'Call Back' Mode.
9)Phone Area Code Control.

MessageProvider: Voice Mail/Fax Mail/Auto-Attendant

Feature:
- Personal Mailboxes.
- Message Forward.
- Pager Notification.
- Remote Control.
- Fax Store & Forword.
- Auto Attendant.
- Password Security.
- Date/Time Record & Report.
- Multi-Tasking Greeting.
- Background Operation.
- Call Screening.
- 2 lines up to 16 lines

Product Items:

(1)Auto-Attendant/Voice Mail/Fax Mail
-For Any Industry w/Off-Site Employees-
(2)Auto-Attendant/Voice Mail
-For Any Industry-
(3)Voice Mail/Fax Mail
-For Voice Mail Provider & Real Estate-

"Customer Made Available"

Price
Start From $900

TW TransWell
Communications Company
3000 Scott Boulevard Ste #106
Santa Clara, CA. 95054

Tel: (408) 988-5916
Fax:(408) 988-5922
Business hours:
M-F:9:00-6:00, Sat. 10.00-3:00

Prices subject to change w/o notice.

For Daily Prices, Call (408) 988-5918
24 Hours Fax-On-Demand Lines
Receive "Lowest Prices" by Fax Instantly!

Over 20 shipping points NATIONWIDE!

FastLink Network Products

Network Products for Less!

VISA MasterCard

ADDITIONAL SAVINGS ON THESE POPULAR ITEMS

3Com

Etherlink III Parallel Tasking Adapter
3C509TP w/o drivers/docs

ONLY $75 EACH

HEWLETT PACKARD

New Lower Prices on HP Advanced Stack Hubs

12 Ports	$617
24 Ports	$1,062
48 Ports	$1,963
SNMP Module	$491

SMC EtherEZ ISA Adapter 10BT	$75

Don't miss this special introductory offer on SMC's newest Plug N' Play network adapter.

NetWorth 3Com SMC

Fast Ethernet Is Here!

3COM 3C595 10/100BT PCI Adapter	$255
Networth 10/100BaseT PCI Adapter	$251
Networth Micro100 100BaseT Hub	$1,410
SMC EtherPower PCI 10/100 PCI	$220

Coax Ethernet

3COM 3C509B Single/5-Pk/20-Pk	119/520/1,886
3C529 Etherlink III MCA Single/5-Pack	249/1,047
Intel EtherExpress 16 MCA	186
EAGLE EP2000 Plus	81
NE2000 Plus 3/5-Pk	92/428
SMC Elite Ultra Coax/6Pk/24Pk	95/530/1,970
EtherCard Elite/A FOR PS/2	198
3COM 3C579 32-bit Coax/5-Pack	243/1,049
EAGLE NE3200 32-Bit EISA Combo	464
EAGLE NE2/32C 32-Bit MC	576

10 Base-T Twisted Pair Ethernet

MILAN Transceiver (AUI-RJ45)	49
3COM 3C509TP 16-bit/5-Pk/20-Pk	114/490/1,751
3C509TP0 (w/o DOC or DRIVERS)	75
3C509B-TP0 Sing/5-Pk/20-Pk/60-Pk	109/458/1,630/4,412
3C509B COMBO/5-Pk	129/568
3C509B Combo 20-Pk/60-Pk	2,061/5,661
3C529B TP MCA/5-Pack	244/1,026/5,661
INTEL Pro TP/5-Pk/20-Pk/60-Pk	101/430/1,518/5,424
EE Pro TP&BNC/5-Pk/20-Pk/80-Pk	110/481/1,821/6,410
EE Pro TP w/FLASH/5-Pk/80-Pk	116/462/1,670/5,918
EE Pro TP&BNC w/FLASH/5/20/80-Pk	126/532/1,987/7,039
SMC EtherEZ ISA Plug N Play Combo	129
Elite Ultra 16TP/6-Pk/24Pk	95/478/1,697
Elite Ultra Combo/6-Pk/24-Pk	108/591/2,122
Elite 10T/A 10 BaseT MCA	198

PCI Lan Adapters

3COM 3C590TP0 PCI 10BaseT	148
ACCTON EN1203 EtherDuo PCI Combo	153
COGENT EM960TP PCI 10BaseT	148
MICRODYNE NE5500 PCI Combo/5-Pk	163/740
RACAL INTERLAN PCI TP/Combo	138/152
SMC EtherPower PCI 10BT/5-Pack	180/841
EtherPower PCI Combo/5-Pack	204/938
THOMAS CONRAD TC5048 PCI 10BT/5-Pk	207/884

100 MegaBit Lan

3COM 3C595 EtherLink 10/100BaseT PCI	255
3COM 3C770A EISA FDDILINK-STP/UTP	1,066/819
3C771A EISA FDDILINK-FIBER	1,436
INTEL EExpress Pro 10/100 PCI	235
EExpress Pro 10/100 EISA	352
NATIONAL SEMI NF3000-F-1 FDDI ISA Fiber	1,336
NF3500-F-1 FDDI EISA Fiber	1,230
NETWORTH SwiftNIC 10/100BaseT PCI/EISA	251/398
ROCKWELL 8-port FDDI UTP Concentrator	4,595
SMC EtherPower 10/100BT PCI Single/5-Pk	220/1,049

Token Ring

3COM TokenLink III 16/4/10-Pk	260/2,389
TokenLink III EISA 16/4	576
IBM Token Ring 16/4 Adapter II	426
INTEL Token Express Pro 16/4 ISA	277
PROTEON P1392+ Token Ring 16/4/10-Pk	430/4,049
SMC Token Ring Elite 16/4 Single/12-pack	264/2,900

PCMCIA/Parallel Port Adapters

3COM 3C589B PCMCIA 10BT/COMBO	164/216
3COM 3C689 PCMCIA TR/5-Pk	410/1,935
IBM Credit Card Coax/TP Adapter	242/261
Credit Card Token Ring 16/4 Adapter	480
NATIONAL SEMI PCMCIA Ethernet Adapter	189
Additional Media Coupler for Thin/10BT	79
SMC ElitePort EtherNote Combo	235
XIRCOM Pocket Adapter III 10BaseT	284
Pocket ENET III COMBO(BNC & 10BaseT)	325
Pocket Token Ring TYPE1/TYPE3	484
Pocket PEM-10BT Fax/Modem 10BT/BNC	505
PS PCMCIA 10BaseT/Combo	225/274
PS PCMCIA Token Ring	492
PCMCIA Ethernet Fax/Modem 10BT/Combo	493/518

Concentrators & MAUs

3COM Linkbuilder TP/12 NO AUI/BNC	350
ASANTE 8-Port w/AUI&BNC/12-Ports	195/395
24-Port w/AUI	599
ALLIED TELESYN 4/8/12 Port (AUI)	209/229/456
MICRODYNE 5318+ 16 ports w/BNC&AUI	547
BAY NETWORKS 800 8-port w/AUI	294
2800A 16 ports w/AUI	572
NETWORTH Micro100 100BaseT 8-port Hub	1,410
SMC 3608TP 8-Port/3512TP 12-port	304/568
Elite 4000C TR Mau 8-port/16-port	722/1,106
3COM Linkbuilder TR 3C510180	1,875

SNMP Manageable Concentrators

3COM Linkbuilder FMS II TP Hub-12 ports	609
Linkbuilder FMS II TP Hub-24 port/48-port	1,058/2,256
Linkbuilder FMS II Management Module	484
HEWLETT PACKARD Advanced Stack 12-port	617

Advanced Stack 24-port/48-port	1,062/1,963
Advanced Stack SNMP module	491
Advanced Stack 12-port w/SNMP	960
Adv. Stack 24-pt w/SNMP/48-pt w/SNMP	1,440/2,261
NETWORTH 8-Port Snappable	650
16-Port Snappable Hub	930
16-Port SnapNet Bundle (1 Hub/5 Nic)	1,267
16-Port SnapView Bundle (1 Hub/HubView Sw)	1,296
48-Port Snappable Bundle	2,603
24-Port TriSegment Stackable Hub	1,288
24-Port TriSegment Mgmt. Hub	2,041
PowerPipes Ethernet/FDDI Switching Hub	7,487
BAY NETWORKS 810M 8 ports w/ AUI managed	572
2800A 16-port w/AUI	598
2803 16-port w/AUI/2804 w/FIBER	649/875
2813-04/2813-05 16-port w/AUI	1,576/1,010
2814-04/2814-05 16-port w/FIBER	1,791/1,246
3314A-03 Mgmt. Module w/Basic SNMP	2,064
3314A-04 Mgmt. Module w/Advanced SNMP	3.266

Network Management

3COM Transcend Workgroup Mg for Windows	496
Transcend Enterprise Mgr for Windows	2,181
FRYE NetWare Mgmt 1st/Add Svr	337/277
HEWLETT PACKARD OpenView Interconnect	2,070
OpenView Workgroup Manager	1,420
INTEL LanDesk Manager	1,047
LanDesk SNMP Gateway/Response	578/717
LanDesk Traffic Analyst	718
LanDesk OpenView for Windows	1,789
NOVELL Lanalyzer for Windows v2.1	1,100
NetWare Management System	1,692
NetWare Management Agent (Single)/20PK	338/5,382
NetWare LANalyzer Agent v1.0 (Single)	1,008
NetWare LANalyzer Agent (Multiple Segment)	1,692
NETWORTH HubView or HubView for NMS	733

Repeaters

TUT Systems XL1501 (1BNC/1RJ11)	1,024
XL1502 (2BNC/2RJ11)	1,465
XL1503 (1BNC/1RJ11/1AUI)	1,1104
XL1504 (4BNC/4RJ11/1AUI)	2.850
XL600+ 600' Repeater (1 Pair)	483
Dual Port Repeater BNC/BNC	293
Quad/Octo Port Repeater (4 BNC/8 BNC)	368/662

Tape Backup Solutions

CHEYENNE ARCserve v5.01 NLM 5/10	261/511
ARCserve 25/50 users	882/1,082
ARCserve v5.01 100/250 users	1,198/1,503
ARCserve v5.01 500/1000	2,551/5,842
Changer Option for v5.0/Stacker Option	456/470
PALINDROME Backup Director NLM 1 SVR	585
Network Archivist NLM 1 SVR	1,212
Archivist Autoloader Single/Multi-Drive	585/1,455
COLORADO Power Tape 1.1GB w/o Ctrl	696
Power Tape Int. 2GB SCSI Tape Drive w/Ctrl	1,065
Power Tape Ext-25 2 GB SCSI Tape Drive w/Ctrl	1,236
Power Tape 50-4 GB SCSI Tape Drive w/Ctrl	1,295
Power Tape Ext 50-4 GB SCSI Tape Drive w/Ctrl	1,555
CONNER Backup Exec Single Server 25 Users	339
Backup Exec Single Server Unlimited Users	472
Backup Exec NetWare Enterprise NLM	871

Bridges/Routers

Rockwell NetHopper NH-5 Remote Access Router	CALL
NetHopper NH-P NetWare Async Rtr w/v.34	1,542
NetHopper NH-SYNC+ Sync Router	CALL
MOTOROLA DDS/MR64 V.35 or RS232	463

Remote Access

CITRIX WinView Software 10-User	2,354
NOVELL NetWare Connect 2/8/32 pts	444/1,602/4,382
NetWare Connect 2-port w/Modem and Serial I/O	1,181
NetWare Connect 8-port w/Modem and Serial I/O	4,337
SHIVA Net Modem/E 28.8	1,537
Lanrover/2E Plus	2,501
Lanrover/E 3.5 8prt	3,847
Lanrover/E Plus Async 8prt w/o modems	5,179
Lanrover/E Plus 8-port v.34	7,898
DIGIBOARD Digi 2-Pt/4-Pt/8-Pt	200/455/588
U.S. ROBOTICS 2-port Lan Modem Enet/TR	1,590/1,986

Network Printing Solutions

CASTELLE Jetpress XIO BNC/10Base-T	381
Jetpress MIO for HP4/MIO PLUS	349/451
LANPress 10BT (1 PAR)	313
LANPress THIN/10BT (1PAR/1SER)	362
LANPress THICK/10BT (2 PAR/2SER)	512
HEWLETT PACKARD JetDirect 10BT MIO	330
JetDirect Combo MIO BNC/10BT	400
JetDirect Token Ring	567
INTEL Netport EL Ethernet/Token Ring	427/588
NetportExpress XL for Ethernet/Token Ring	475/660
MILAN Fastport 3000 1P/1S, BNC/10BT.	459
Fastport 3100	710
Fastport 3500X TR Multi-Protocol	654

Network Fax Solutions

CASTELLE FaxPress 1000, 10BT/BNC	1,576
CHEYENNE FaxServe 3 NLM 5/10/25	393/717/1,177
FaxServe 3 NLM 50/100	1,816/2,533
FaxServe 3 NLM 250/500	3,801/4,982
FaxServe 3 NLM 1000	6,229
INTEL Net Satisfaxtion for 8 fax boards (25 users)	786
Net Satisfaxtion (1000 users)	1,040
DELRINA Winfax Pro for Networks (Server)	125
10/25/50/ Users	675/1,509/2,851
Starter Kit (1 Server, 2 nodes)	274
PURE DATA Satisfaxtion Modem 200/400	244/315
U.S. ROBOTICS Ethernet Fax Server	1,970
Token Ring Fax Server	2,227

Network CD-ROM

MERIDIAN CD-Net for DOS v4.31 (10 Users)	467
CD-Net for DOS v4.6 (10 Users/WAN)	648
CD-Net for NetWare (NLM-10 Users)	467
CD-Net for NetWare 100/250 Users	938/1,445
MICRO DESIGN SCSI Express for NetWare, MDI	599
SCSI Express for NW3/4, Non-MDI(25 Users)	910
SCSI Express for NW3/4, Non-MDI(1,000 Users)	1,332
CD-Rom LaserBank 600CD Ext. Single/Dual	599/1,117
MICROTEST Discport Ethernet/Token Ring	716/1,066
Discport w/NEC Ext. Quad Speed CD-Rom	1,282
Discport w/NEC 4-Unit/7-Unit Tower	2,906/4,249
DiscServ NLM	558

Uninterruptible Power Supplies

APC Back-UPS 400/450	163/200
Back-UPS 600/900/1250	273/392/512
Powerchute Plus for Novell/Unix	99/149
Smart-UPS 400/600/600RM/900	320/382/496/544
Smart-UPS 1250/1250RM/2000RM	674/805/1,176
Smart-UPS SERIES W/PC+ AP600NET	445
AP900NET/AP1250NET/AP2000NET	607/739/1,240
Matrix 3000/5000/Smartcell	3,720/4,616/537
SNMP Agent for Novell/SNMP Mgr for Netware	125/145

Cable Testers & Supplies

RG58 & RG62 Rachet BNC Crimper/RJ45	45
RG58 Ethernet BNC-Crimp (100 pak)	125
RJ45 10 BaseT Connectors (100 pak)	40
10Base-T Cable (1000' min) LV3/LV 5	100/200
BELDEN PVC RG58 or RG62 Cable (1000' min)	175
PLENUM RG58 or RG62 Cable (1000' min)	350
MICROTEST MT310 Kit	739
MT350 Value Kit/Fiber Solution Kit	1,837/1,482
Penta Scanner/Compas Kit	2,706/3,967

Novell Software

Lan WorkPlace for DOS Single/10 Users	309/1,508
Lan Workplace for Mac Single/10 Users	289/1,437
Lan WorkGroup-5/10/20 Users	1,125/1,866/2,613
NetWare for Mac v3.12 200 Users/4.01	685/851
Multiprotocol Router/MPR Router Plus	720/1,032
NetWare NFS Single/5-pk	3,215/10,537
NetWare NFS Starter Kit	1,095
NetWare NFS Gateway 5/10 User	1,040/2,156
Global MHS v2.0 20/50/100 Users	358/648/1,064
MHS v1.5 Network Edition 10/50/100 Users	140/504/733
MHS Multi-Network Edition 10 Users	140
Personal NetWare Single/5-Users	79/279

E-Mail

cc:MAIL Desktop-Any Platform	72
10 users/50 Users	361/1,715
Group Pack 10-pack DOS/WIN	638
Mobile for DOS or MAC	150
Router/Fax	95/1,459
Link to SMTP v2.0/Link to UUCP	2,473/370
MICROSOFT PC Mail Server + 10 Users	485
PC Mail 5/20/100 Users	273/930/3,633
MHS Gateway/PROFS	708/3,405
SMTP/X400/Fax Gateway	3,405/3,405/1 419

Network Utilities

SYMANTEC Anti-Virus for NetWare	889
SABER Server Manager NLM	499
CHEYENNE InocuLAN 20/250 workstations	326/655
InocuLAN Option 25/100/250/1000	133/190/260/325
Utils for NetWare	257
COREL Network (RAID/CDROM/OPTICAL sw)	420
DIRECT ACCESS Network Menu	425
FUNK App Meter	464
FRYE Early Warning System or Lan Directory	339
INTEL LanDesk Virus Protect (Single)	696
LanDesk Virus Protect 4-pk/20-pk	2,070/6,757
MICROTEST Lan Assist or Map Assist	211
SYMANTEC Norton Admin. 5/10 Users	247/438
Norton Admin. 25/50/100 Users	1,068/2.028/3.680

ISDN Connectivity

DIGI Datafire 16 Bit ISDN (PPP)	409
PC-IMAC ISDN	533
PC-IMAC/4-1 Multiport ISDN	672
PC-IMAC/4-2 Multiport ISDN	1,064
PC-IMAC/4-4 Multiport ISDN	2,092
IBM WaveRunner ISDN ISA/MCA	562/562
HAYES ISDN Adapter	733
MOTOROLA UTA220 ISDN	616
HMTA200 ISDN/v.32/Fax	711
TA210 ISDN/Voice/Data	409

Windows NT

MICROSOFT Windows NT Server	703
Windows NT Server Add'l Server	620
Windows NT Workstation Single User	281

Peer-to-Peer Networking

ARTISOFT LANtastic 6.0 Network Starter Kit	244
LANtastic 6.0 Add-On Kit Coax/10BT	131
LANtastic 6.0 Software Single/5/10 User	99/354/637
LANtastic 6.0 Software 25/50/100	1,272/2,118/3,460
LANtastic Management Serv./Advan	144/578
Central Station NetWare	358
Noderunner/SI Coax or TP/Combo	124/154
Noderunner/SI Coax/TP (5 pack)	423/440
Lantastic for MAC	433
Lantastic for TCP/IP Single/5 Pk	220/883
CorStream 5/10/25 Users	699/1,362/2,209
CorStream 50/100 Users	2,754/4,026
MICROSOFT Windows for Workgroup V3.11	159
WFW V3.11 Add-On for Windows 3.1	69
NATIONAL SEMI Personal NetWare Starter Kit	260
One Station Expansion Kit	161

Groupware

LOTUS Notes Starter Pack for NetWare	921
Group Pack (1 Server and 10 Nodes)	4,434
Server for OS/2/Win/SCO/AIX/SUN/HPUX	384
Clients for OS/2/Win/MAC/SCO/AIX/SUN/HPUX	372
Client Licenses 1/10/20	328/3,111/6,235
Document Imaging Server	2,711
Inbound or Outbound FAX gateway	2,233

Server Mirroring

EAGLE NMSL/C Mirror Server Link	806
NMSL/F Mirror Server Link	1,174
MICRODYNE NMSL/C Mirror Server Link	826
NMSL/F Mirror Server Link	1,204
VINCA Standby Server ISA	1,424

Wireless Adapters

SOLECTEK Wireless ISA Kit (2 cards)	1,494
PCMCIA Wireless Adapter	674
ISA Wireless Adapter	652
AIRLAN/Bridge	CALL
AIRLAN/Hub	CALL

- ***LOWEST PRICE GUARANTEE ! ASK FOR DETAILS.***
- ***NOVELL, SCO, ARTISOFT*** trained & authorized.
- Over 20,000 items from over 700 vendors. Call us for those hard to find items. Our computerized catalog can locate them within seconds.
- **VISA & MASTERCARD** Accepted. NEVER A SURCHARGE.
- Same day shipping & NEXT DAY guaranteed delivery avail. on most orders.
- International orders accepted. Payment by Credit Card or Wire Transfer.
- Courtesy TERMS available to Govt., Education, & Fortune 1500 Accounts.
- Fortune 1500 companies, Government, & Education P.O. accepted on approved credit.

1-800-788-LANS

HRS: M-F 8:00 AM TO 6:00 PM PACIFIC TIME
ADDR: 90 South Spruce Avenue, Suite N
South San Francisco, CA 94080
PHONE: 415-872-1376 FAX: 415-872-6634
email: fastlink@netcom.com

CODE: MT506

- Restocking fee applies to all non-defective returns and refused shipments. ***OPENED SOFTWARE IS NOT RETURNABLE.***
- Prices & Specifications subject to change without notice.
- We are not responsible for typographical errors.
- Shipping & Handling charges will be added to all orders.
- Quantity pricing available for 10 units or more.

Internet Users: Download our catalog via ftp.netcom.com.
Filename: /pub/fa/fastlink/fastlink.exe!

GULCH GOSSIP *continued...*

based upon *The Brady Bunch* television series." Little known start-up Paniagua got the license because the actor who played Peter Brady, **Christopher Knight**, is an investor in the company. The first title is a geography learning title.

LOOK

The Academy of Art College hosts "Our Visual Future," an exhibition of "digital fine art," from May 1 through May 26 at the 410 Bush Street Gallery. I am extremely happy that our visual future is so fine—I was becoming afraid that it was all going to be interactive TV, home shopping, and home pages.

There will be video and prints by the **Miller** brothers of Myst fame, **Dewy Reid** of Colossal Pictures, **Peter Hogg** of The Digital Pond, and **John Derry** and **Mark Zimmer** of Fractal Design Corp., as well as the College's owner **Larry Keenan** and **Henry Lim**. It's my impression that no student works will be shown.

Gorby Goes to Cyberlab 7

Dan Mapes and Cyberlab 7 have a couple of heavy-duty international multimedia affairs going on. One is with the United Nations, having to do with the 50th Anniversary Project. The second is with **Mikhail Gorbachev** and his World Affairs Forum.

Dan was particularly excited when I talked with him as Cyberlab 7 had just got its T1 link up to Tokyo. He explained, "We're doing live multimedia on the Internet. We're applying multimedia to imagining a planet. Can multimedia tools assist us in any way? We don't know the answers but we're willing to experiment."

Anyway, see for yourself, the reception is May 4 from 5:30 to 7:30 pm; otherwise the hours are Monday through Thursday, 8 am 'til midnight, Friday 'til 10 pm, Saturday 'til 8 pm, and Sunday 9 am 'til 7 pm. Further info from (415)274-2204.

MOVE

It's not exactly all digital but, for another angle on multimedia, check **Doug Wendt**'s revival (and survival after the train wreck of the Kennel Club) from 9 pm the last Friday and Sunday of every month, through July at the Transmission Theatre, 314 11th Street, San Francisco.

He's calling it the All-World Mix; the backbone is music videos from all around the world, but Doug tends to add a few things like topical news broadcasts synced to a classic track with wicked effect. And I'll bet that a lot of the videos are produced using digital techniques. Your interactivity comes in the form of moving your body. Call (415)861-6906 for further info.

continued on page 345

Attention Multimedia Advertisers!

Reach California's early adopters and industry insiders in the multimedia market...
advertise in MicroTimes' *MultiMedia & Beyond.*

- **The most** cost-effective advertising tool to reach the dynamic California marketplace—the people who are buying *now*!
- **230,000** issues strong throughout Greater Los Angeles and the San Francisco Bay Area—the hottest multimedia regions in the country.
- **The place** to break new announcements or test-market your product or service.

Call today for advertising information:
In Northern California: (510) 934-3700
In Southern California: (213) 851-8600

MicroTimes' *Multimedia & Beyond*: Providing information and resources to the producers and consumers of multimedia.

Multi & Media beyond

YOUR TRI-VALLEY COMPUTER CONNECTION

REPAIRS•UPGRADES•NETWORKS•PROGRAMMING

Call us for our Expert Technical Support

LIFETIME LABOR
1 YEAR PARTS
COMPUTER
WARRANTY

WE SUPPORT NOVELL, LANTASTIC & WORKGROUPS

HOT CD TITLES

MONTHLY SPECIALS

SOUND BLASTER 16	$89	17" IMPRESSION FLAT	$589
MINI TOWER CASE	$38	CONNER 1.2 GIG	$375
14400 FAX/MODEM	$67	QUANTUM .540 HD	$199
1.44 FLOPPY DRIVE	$38	ENH.IDE CONTROLLER	$59
35 WATT SPEAKERS	$49	SONY IDE CD-ROM	$132
120 WATT SPEAKERS	$69	TAPE BACKUP 350MB	$169
VLB SVGA CARD 1MB	$79	386DX-40 M/B W/CPU	$97

WINDOWS 3.11
DOS 6.22
DISKS & MANUALS ARE AVAILABLE WITH ANY NEW SYSTEM PURCHASE

MOTHERBOARD W/CPU

PENTIUM100 W/256K PCI	$969
PENTIUM 90 W/ 256K PCI	$819
PENTIUM 66 W/ 256K PCI	$549
486 DX4 100 W/256K VLB (AMD)	$319
486 DX4 100 W/256K VLB (INTEL)	$369
486 DX2-66 W/256K PCI (AMD)	$279
486 DX2-66 W/256K VLB (AMD)	$239
486 DX-33 W/256K VLB (INTEL)	$229
486 SX-33 W/256K VLB (INTEL)	$184
SLC 66 W/64K (IBM)	$175
386DX-40 W/128K ISA (AMD)	$97

ULTIMATE PENTIUM-90

PENTIUM 90 W/256K PCI
16MB RAM 70NS 72 PINS (MAX 192MB)
1.2 GIG IDE HARD DRIVE
2-16550 HIGH SPEED SERIAL PORTS
1.2 & 1.44MB FLOPPY DRIVES
DIAMOND STEALTH 64 PCI VGA 2MB
MED TOWER CASE
17" SVGA .28 NONINTERLACED
101 ENHANCE KEYBOARD
TOSHIBA QUAD CD-ROM
SOUND BLASTER 16 SCSI
35 WATT SPEAKERS
MICROSOFT COMPATIBLE MOUSE

$3119

BASIC PENTIUM-90

PENTIUM 90 W/256K PCI
16MB RAM 70NS 72 PINS (MAX 192MB)
540MB IDE HARD DIVE
PCI IDE CONTROLLER BUILT-IN
2-16550 HIGH SPEED SERIAL PORTS
1 PARALLEL PORT
1.2 & 1.44MB FLOPPY DRIVES
DIAMOND STEALTH 64 PCI VGA 2MB
15" SVGA MONITOR 1280X1024
MINI TOWER CASE
101 KEYTRONICS KEYBOARD
MICROSOFT COMPATIBLE MOUSE

$2259

BASIC PENTIUM 100

PENTIUM 100 W/256K PCI
16MB RAM 70NS 72 PINS (MAX 192MB)
1.2 GIG IDE HARD DRIVE
PCI IDE CONTROLLER BUILT-IN
2-16550 HIGH SPEED SERIAL PORTS
1 PARALLEL PORT
1.2 & 1.44MB FLOPPY DRIVES
DIAMOND STEALTH 64 PCI VGA 2MB
17" SVGA .28 NONINTERLACED
MED TOWER CASE
101 ENHANCE KEYBOARD
MICROSOFT COMPATIBLE MOUSE

$2799

TOSHIBA QUAD SCSI
SOUND BLASTER 16 SCSI
35 WATT DELUXE SPEAKERS
6 CD TITLE PACK
INSTALLED ***$529***

MULTIMEDIA CD-ROM UPGRADES

SONY DOUBLE SPEED IDE
SOUND BLASTER 16
40 WATT DELUXE SPEAKERS
6 CD TITLE PACK
INSTALLED ***$299***

FREE OFFER

MENTION THIS AD WITH ANY PURCHASE OF $50 AND RECEIVE ONE BOX OF 10 1.44MB HD FLOPPY DISKS. A $6.00 VALUE

SPECIAL 486DX2-66 SYSTEM

486DX2-66 W/3VLB SLOTS & 256K
4MB RAM 70NS
420 IDE HARD DRIVE
VLB HD CONTROLLER
VLB SVGA CONTROLLER 1MB
14" SVGA MONITOR .28 NI
1.44 FLOPPY DRIVE
101 ENHANCED KEYBOARD
MINI TOWER OR DESK TOP CASE
MICROSOFT COMPATIBLE MOUSE

$999

DX2-66 MULTIMEDIA SYSTEM

486DX2-66 W/3VLB SLOTS & 256K
8MB RAM 70NS
540 IDE HARD DRIVE
VLB IDE CONTROLLER
VLB SVGA CONTROLLER
15" SVGA MONITOR 1280X1024
1.44 FLOPPY DRIVE
101 ENHANCED KEYBOARD
SONY DOUBLE SPEED IDE CD-ROM
SOUND BLASTER 16
MINI TOWER CASE
35 WATT SPEAKERS
MICROSOFT COMPATIBLE MOUSE
6 CD TITLE PACK

$1479

SCREAMING 486 DX4-100

486 DX4-100 W/256K (ASUS W/SIS)
16MB RAM 70NS 72 PINS (MAX 128MB)
540 MB HARD DRIVE
PCI IDE CONTROLLER BUILT-IN
2 SEL, 1PARALLEL,1GAME
1.44MB FLOPPY DRIVES
DIAMOND STEALTH 64 PCI VGA 2MB
15" SVGA MONITOR 1280X1024
MINI TOWER CASE
101 KEYTRONICS KEYBOARD
MICROSOFT COMPATIBLE MOUSE
SONY DOUBLE SPEED CD-ROM
SOUNBLASTER 16
6 CD TITLE PACK

$2019

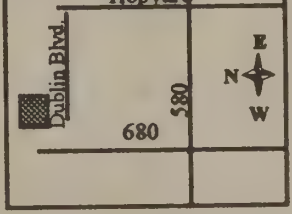
BASIC 486 DX4-100

486 DX4-100 W/256K
8MB RAM 70NS 72 PINS (MAX 128MB)
540 MB HARD DRIVE
VLB IDE CONTROLLER
VLB SVGA CONTROLLER
2 SEL, 1PARALLEL,1GAME
1.44MB FLOPPY DRIVES
15" SVGA MONITOR 1280X1024
MINI TOWER CASE
101 ENHANCED KEYBOARD
MICROSOFT COMPATIBLE MOUSE

$1359

Soft Solutions

6997 Dublin Blvd.
Dublin Ca. 94568
510-803-1358 Tel:
510-803-1372 Fax:



MON-FRI..........9-6
SATURDAY...11-4

Member
BBB
Better Business Bureau

All prices subject to change without notice
We are not responsible for typeographical errors
All prices subject to cash and stock availibilty

MULTIMEDIA 101

Is It Pop? Or Is It Poop?

Multimedia And The Music Biz

"Talk about pop music, it's all around you" sang the artist known as M in his classic synth-pop single, "Pop Muzik," all the way back in 1978.

While we haven't heard much recently from Robin Scott, M's real name, it was something of a prescient song, predicting not only the increasingly global nature of pop music, but also the emerging new media channels for pop's consumption and the inexorable increase in demand for celebrity gossip and other information about musical figureheads.

But, despite those changes, the music business is still pretty much the music business and the basic product remains the same as it was then. Styles have changed, MTV has spawned the video dimension, but ultimately—in the mainstream at least—it's still about selling mega-units of (linear) ear candy. What M didn't see, and what the music industry is driving itself nuts trying to bring into focus, are the new vistas that computer-mediated music and interaction bring into sight.

Currently, CD-ROMs, along with whatever else you wish to define as interactive multimedia, are poised to become real outlets for popular musical and creative expression—hopefully with the power, elegance and reach of yesterday's finest music, along with something extra that will come from the mix of nonlinearity, music, video, and interactivity. Obviously, despite the hype, there are still some fundamental problems to be solved in order for this state of cultural elevation to be actually delivered rather than merely promised.

The Groove Thing

In the meantime, however, multimedia does yeoman duty in its more pedestrian and ancillary, but still vital, dual roles as signposts to and repositories of pop music's more traditional media outlets. In other words, it's already yet another of those media channels, admittedly a relatively minor one, disseminating the supplementary material that endlessly loops back into the maw of the pop machine.

Witness such titles as Voyager's *People Weekly—20 Amazing Years of Pop Culture*, Digital Entertainment's *Back Stage With John Tesh*, and Sanctuary Woods' *Radio Active: The Music Trivia Game Show*. While this has so far been mostly a matter of driving by looking in the rear-view mirror, three of the products discussed below begin to break out of the old structures and point the way, however hesitantly, towards new forms of entertainment—and perhaps even culture.

BOB DYLAN—HIGHWAY 61 INTERACTIVE

Something's bugging me—and I know exactly what it is. Somehow the name of the man who pretty much invented both Dylanology and garbageology by going through Bob Dylan's dis-

BY JONATHAN E.

IS IT POP? OR IS IT POOP? *continued...*

cards has exited my memory. I should be able to rediscover his name somewhere within *Bob Dylan—Highway 61 Interactive*—but I can't.

This title *is* stuffed with tons of good, even great, Dylan material that redeems it from being totally worthless, but it's such a disorganized hodge-podge that the frustration level rises above comfortable limits. The most glaring example is that while all of Dylan's songs are here with complete lyrics, they are only searchable by an alphabetical listing of titles or within each individual album release. You can't search for a memorable turn of phrase such as "watch the parking meters." In addition, this particular section is extremely slow to use.

Besides this, the CD-ROM contains six 3-D environments representing significant stages of Dylan's history, where you poke around to find various virtual mementos, newspaper clips, video clips, and alternative takes of "Like a Rolling Stone." There are also collections of concert tickets, backstage passes, childhood photos, adult photos, and Dylan's graphic art, as well as a timeline combining his history with world events. There's an early video of "Blowing in the Wind," a specially made video of "Masters of War," plus several performance videos. Many videos are of other artists slobbering over Dylan's genius.

> It is really a ***crying shame*** that the opportunity to produce a seriously ***evaluative multimedia*** CD-ROM work on Dylan ***was missed.***

And that's another major problem with *Bob Dylan—Highway 61 Interactive*. There's absolutely no critical evaluation of his work. Sure, the man has made some great music and influenced a lot of people, but let's face it, his greatest work came in the first third of his career—and this fact is mentioned nowhere. You'll basically learn more about Bob Dylan the artist in the less-than-two thousand words Dave Marsh uses in *The Rolling Stone Record Guide*. It makes no sense—and is not a service to the user—not to distinguish between the importance of *Live at Budokan* and *Bringing It All Back Home* or *Blood on the Tracks*.

While this is not the complete disaster of Graphix Zone's previous Prince Interactive CD-ROM (thanks to some improvements in this title's overall design and handling, but primarily, I think, due to Dylan's undoubtedly greater cultural significance), it is really a crying shame that the opportunity to produce a seriously evaluative multimedia CD-ROM work on Dylan was missed. I suspect that this has something to do with the murky issues of copyright and fair use, and the ways in which giant entertainment conglomerates and sensitive artists will allow their works to be used.

HEADTRAVEL

This CD-Plus has seven Red Book audio tracks of San Francisco-originated beep-and-burble-with-a-beat music, loosely falling with the electronic/experimental/dance genres. It's the sort of stuff I like some days but find rather bland on others.

This collection, however, is definitely a cut above the average. What merits its inclusion in this column is the first track, a CD-ROM data track with three consecutively running videos, lots of still photos of people dancing, DJs and other scenesters, reproductions of rave fliers, short loops from all the audio tracks, an interactive issue of *XLR8R* magazine, and several advertisements for DJ, media, and design outfits in the San Francisco underground dance scene.

The design is pretty funky and unpolished, although the interface has a couple of innovative features that work well if you can accept a bit of looseness. This is a CD-ROM that reflects the experience it depicts with a spirit of authenticity. It's a real cultural document and a genuine celebration of a vibrant community.

I'm generally skeptical of CD-Plus but *HeadTravel* shows that it's possible to do something worthwhile with it. If the big record labels could come up with something even half as valuable, I'd be surprised. A coalition of San Francisco independent artists known as the Pacific Collective produced *HeadTravel*, and it's distributed by the LA-based Moonshine label through both record stores and, hopefully, software outlets at a standard audio-only CD price.

ROCK & ROLL ART—FAMOUS CONCERT POSTERS

Screen savers might be stretching the definition of multimedia a bit, but *Rock & Roll Art—Famous Concert Posters* certainly has a musical connection, acting as cultural repository, even though the product itself contains no music.

Basically, it's a collection of thirty-three posters by artists such as Victor Moscoso, Stanley Mouse, Alton Kelley, Rick Griffin, and others for Family Dog Avalon shows back in 1966, 1967, and 1968. It works fine as a screen saver. The art looks great and this early psychedelic art is an interesting contrast to current psychedelic and cyber styles.

However, the art is now presented in a digital medium, and I'd prefer to see advantage taken of the medium's capabilities instead of simply having a randomly selected poster appear on my screen every so often.

Specifically, I would like to be able to sort and order the posters by such categories as graphic artist, musical artist, and chronology. I'd also like to be able to page through them and have some more background information provided. Considering the famous illegibilty of the originals, it might be a silly request but I'd also like a translation of their contents. As it is, it's even harder to read them on the computer screen than as first printed on paper.

Rock & Roll Art—Famous Concert Posters has a couple of design problems even as a mere screen saver. When it installs itself on your hard disk, it doesn't tell you where it's been installed and it appears under the company's name rather than the product name, which adds to the cognitive dissonance. It's also fairly bulky, being a collection of richly detailed and colored images.

However, once in the digital domain, the art is ripe for updating to an even higher psychedelic level, which makes the product definitely worth owning. I suggest opening the files with Dynaware's Kirei!, which will allow you to add an awesome and very cool kinetic element to the

IS IT POP? OR IS IT POOP? *continued...*

static originals. (More details on Kirei! in next month's column.)

THE GROOVE THING

The Groove Thing bills itself as "a visual jam," and it's certainly a tasty piece of eye candy. There are also loopadelic sounds in three contemporary styles. There's High Pulse, which is pretty beaty in a techno style; along with Zen Riffs, surprisingly engaging in a drifty ambient way; and Nature, which is an assortment of environmental sounds, usually very irritating, but in this case acceptable. Generally the music is a bit on the generic side rather than bursting forth with any real personality. Each of these styles has nine "kaleidoscopic visions" that go along with it, or conversely each of the nine kaleidoscopic visions has a choice of three musical accompaniments.

Using on-screen controls, keyboard commands, or a pull-down menu you can control various attributes of the graphics such as the line weight, the symmetry of the kaleidoscope, the color palette, the number of tiles on the screen, full-screen display, or a smaller window. There are also controls that let the computer randomize a couple of the functions.

Besides selecting the musical style, you can control the volume or run the visuals silently

continued on page 298

RESOURCES:

***Bob Dylan—Highway 61 Interactive*, $59.95**
Mac and Windows
Graphix Zone
38 Corporate Park, Suite 100
Irvine, CA 92714
1-800-828-3838

HeadTravel
Man Made Media
1388 Haight St., Suite 39
San Francisco, CA 94117
(415)626-7707

***Rock & Roll Art—Famous Concert Posters*, $29.95**
Mac and Windows
Julianne Multimedia Inc.
505B San Marin Dr., Suite 250
Novato, CA 94945
1-800-892-0599

***The Groove Thing*, $49.95 plus $5 shipping**
Mac and Windows
Big Top Productions
548 Fourth St.
San Francisco, CA 94107
1-800-900-PLAY

MusicNet
Free premiere issue from 1-800-MUSIC-NET (but $2.95 for shipping and handling); $29.95 for an annual subscription of four issues; $53.95 for a two-year subscription.
Mac and Windows

LOOK NO FURTHER...

WE HAVE EVERYTHING YOU'RE LOOKING FOR–CALL AND BE AMAZED!

AT PORTABLE COMPUTER CENTER WE ARE ABLE TO CUSTOM BUILD ANY DESKTOP CONFIGURATIONS INTO OUR PORTABLES TO SUIT YOUR NEEDS. PLEASE CALL FOR OPTIONS LIKE INTERNAL CD-ROM, TAPE BACKUP SYSTEM, UP TO TWO GIGABYTE IDE, ESDI, OR SCSI HARD DISKS.

HI CONTRAST VGA PLASMA PORTABLE

150:1 RATIO 101 KEY

- 4 MB Memory (Expandable To 64 MB)
- TEAC 1.44 MB Floppy Drive
- 540 MB Hard Disk 12ms
- SVGA Card w/1 MB Win Accl.
- 2 Serial/1 Parallel Ports
- External Display Up To (1600x1280)
- Plasma Display On/Off Switch
- External Display Up To (1280 x 1024)
- 200 Watt PS 110/220V
- 5 Expansion Slots/Carrying Bag

PENTIUM 100/90/66 MHz	$CALL
486DX4-100 MHz 256K CACHE	1975
486DX2-80 MHz 256K CACHE	1895
486DX2-66 MHz 256K CACHE	1845
486DX-33 MHz 256K CACHE	1795

SVGA SONY TRINITRON CRT PORTABLE

1024 X 768 9.5"

- 10" Color Flat Screen
- 4 MB RAM (Exp 64 MB)
- 540 MB IDE Hard Drive
- TEAC 1.44 MB Floppy
- 2 Serial/Parallel Ports
- SVGA Card w/1 MB
- 6 Expansion Slots
- Deluxe Carrying Bag

486DX4-100 MHz 256K CACHE	$2275
486DX2-66 MHz 256K CACHE	2175
486DX-33 MHz 256K CACHE	2075
486SX-33 MHz 33 MHz CACHE.	2045

ALL PORTABLES ARE AVAILABLE IN PCI, EISA, VESA LOCAL BUS & MULTIMEDIA OPTIONS!

VGA LCD COLOR OR BLACK & WHITE LUNCHBOX PORTABLE

	Passive Color	B/W
486DX4-100 MHz 256K Cache	$1895	$1695
486DX2-80 MHz 256K Cache	1795	1595
486DX2-66 MHz 256K Cach	1775	1575
486SX-33 MHz 256K Cache	1645	1445
PENTIUM 100/90/66/60.		CALL

- 4 Drive Bays
- 8 Expansion Slots
- 4 MB RAM (Expand 128 MB)
- 1.44 MB Floppy Drive
- 2 Serial/Parallel Ports
- 540 MB IDE Hard Drive
- Support Simultaneous Display

DESKTOP MONTHLY SPECIAL

PENTIUM 100/90/ 66/60 MHZ	$CALL
486DX4-100 ISA, VLB, PC	$CALL
486DX2-80 ISA, VLB, PCI	$CALL
486DX2-66 ISA, VLB, PCI	$CALL

All Systems Above Include:
- 4 MB RAM
- 540 MB IDE H. Disk (13ms)
- Teac 1.2 MB and 1.44 MB Floppies
- SVGA Monitor (1024x768 .28 dpi)
- SVGA Video Card w/1 MB
- IDE 2HD/2FD Controller
- 2 Serial/Parallel/Game Port
- Enhanced 101 Keyboard
- Mini Tower or Desktop Case

★ FREE 3-Button Mouse & Gift

PLEASE CALL FOR:
★ OTHER CONFIGURATIONS
★ SYSTEM UPGRADE/REPAIR
★ SOFTWARE INSTALLATION

ACTIVE MATRIX or DUAL SCAN COLOR LCD PORTABLE
8 Expansion Slots
CALL w/ YOUR CONFIGURATION NEEDS AND SPECIFICATIONS. PERFECT FOR THE SOFTWARE & HARDWARE DEVELOPER.

DRIVES/CONTROLLERS

Quantum 2 GB SCSI-2 Drive	$895
Conner 2 GB SCSI-2 Drive	895
Conner 1 GB SCSI-2 Drive	460
Conner 540 MB IDE Drive	175
Conner 420 MB IDE Drive	165
Maxtor 540 MB IDE Drive	180
1.2/1.44 Combo Drive	90
NEC, Toshiba, Sony CD-ROM	CALL
Adaptec 2940W PCI SCSI	285
Adaptec 2940 PCI SCSI	205

ALL-IN-ONE LAN PC WORKSTATION 486SX OR DX VGA

Fully Loaded w/ Your Choice of CPU & HDD w/ 9" Color Monitor

Perfect For Networking & Saving Space

VIDEO/MODEMS

Diamond Stealth 64 PCI 2 B	$169
Diamond Stealth 64 VLBN 2 MB	169
Cirrus Logic VLB 2 MB	70
U.S. Robotics 14.4 Fax Modem	95
U.S. Robotics 28.8 Fax Modem	225
Maxtech 14.4 Fax Modem	35

MONITORS

SVGA 14" (1024x768) NI	$195
SVGA 15" (1280x1024) NI	285
SVGA 17" (1280x1024) NI	675
NEC XE 15" (1024x768) NI	525
NEC XE 17" (1024x768) NI	945
VIEWSONIC 17 (1600x1280) NI	825

Prices subject to change w/o notice.
Prices reflect cash discount.

DEALER PRICING & QUANTITY PRICING AVAILABLE

STORAGE SYSTEM ENGINEERING SERVICE
3350 Scott Blvd., Building 19, Suite 1902
(near Bowers Ave.) Santa Clara, CA 95054

S F Lawrence Expwy. S F. Bowers San Tomas Central Expwy Scott Blvd N S S J

408-727-6040
FAX: 408-727-6042
Hours: 10am-6:30pm M-F
12-4pm SAT

Your Source For Reliable Computers & Peripherals Since 1983

BCS★A

BAY COMPUTER SYSTEM OF AMERICA

SERVICE & QUALITY MAKE THE DIFFERENCE!

5 YEARS LABOR & 1 YEAR PARTS WARRANTY ON ALL SYSTEMS

THIS MONTH'S SPECIALS!

ETHERNET ADAPTER	COLORADO 350MB TAPE BACKUP	NEC 2VI CD-ROM Drive	Zoltrix 14.4 Fax Modem	101 KEYBOARD	US Robotics 14.4 Internal Fax/Modem
$49	$179	$159	$59	$20	$99

MULTIMEDIA SYSTEM 420MB SVGA System

- 486SLC2-66MHz
- 4MB Ram, 1.44 Floppy Drive
- 420MB Hard Drive, 2S/1P/1G
- SVGA Monitor w/1MB Card
- 101 Enhanced Keyboard/MS Compatible Mouse
- Mini Tower Case w/230 WPS
- **MULTIMEDIA**
- Double Speed CD ROM Drive
- 16 Bit Sound Card
  - -MS Encarta
  - -MS Works/Money
  - -MS Entertainment Pack

Complete

$1065

486 DX4-100MHz
VESA Local Bus

- 486 CPU Processor VL Bus
- 256K Cache (up to 1MB)
- 8MB RAM
- 1.44 Floppy Drive IDE IO VL
- 540MB Hard Drive
- 2S, 1P, 1 Game Port
- VL WIN Accelerator Card w/1MB
- SVGA Monitor (.28 DP 1024X768)
- 101 Enhanced Keyboard
- Quality Case w/230 WPS
- MS Compatible Mouse

Complete

$1235

Intel Pentium Processor 90/100MHz

- Pentium Processor PCI BUS
- 8MB RAM 70ns Expandable
- 830MB Hard Drive
- 1.44 Floppy Drive
- ATI Wonder w/1MB
- SVGA NI Monitor .28DP
- 2S, 1P, 1 Game Port
- Medium Tower Case w/230 WPS
- 101 Keyboard
- MS Compatible Mouse

Complete

$1860/2039

MULTIMEDIA

Sound Blaster 16 SCSI II	$109
Sound Blaster MCD 16	80
Mitsumi Quad Speed CD-ROM	199
Panasonic Double Speed CD ROM Drive	130
Toshiba Quad Speed CD-ROM	320
Teac Quad Speed CD-ROM	180
Stereo Speakers	from 10

NOTEBOOKS

DUAL SCAN

486DX-33/66 4MB	$1900/1950
NEC UltraLite	CALL
Toshiba	CALL
Texas Instruments Travelmate	CALL

CASES

Slim Case	$59
Super Mini Tower (Extra Slot)	55
Mini Tower Case w/230 PS	45
Baby AT Case w/230 PS	48
Mid Tower w/230 PS	69
Big Tower w/250 PS	95
Super Full Tower (Built Sturdy)	139

VIDEO OPTIONS

MGP Card	$17
Trident 8900 w/1MB	65
Diamond Stealth 64/2MB VRAM	299
Diamond Viper VL w/2MB	269
ATI Mach 64 w/2MB	289
Diamond Stealth 64/2MB DRAM	175

KEYBOARDS

Maxi Nova 101	$25
Keytronic 101	35
Focus 9000	52
Focus 2001	35
MS Natural	99

HARD DRIVES

420MB Hard Drive	$185
540MB Hard Drive	199
830MB Hard Drive	285
1.2GB Hard Drive	409

CALL FOR OTHER DRIVES

MONITORS

Amber 14"	$95
VGA Mono	119
SVGA 1024x768 .28DP	235
SVGA NI 1024x768 .28DP	245
ADI 4GP	429
NEC 2V 14"	349
NEC XE 15	579
Nanao F550iw	920
Sony 15SF	450
Samsung 15"	349
Samsung 17" .26dp	865

CONTROLLER CARDS

IDE Controller 2FD/2HD	$15
IDE I/O Controller	17
VL IDE I/O Controller	20
Adaptec 2842VL/Kit	259
Adaptec PCI SCSI Master	269

MOTHERBOARDS

486-33/66DX/VL	$225/290
486SLC2/66	149
P-5/90MHz PCI	835
P-5/60MHz PCI	515

SOFTWARE/CD TITLES

MS Works	$99
Turbo Tax	39
Quickbook	99

Call for other titles

MOUSE

3-Button Mouse	$10
Logitech 2-Button	22
Logitech Mouseman/Bus	55/59
Logitech Trackman	79
MS Mouse/Bus	39/69
Qtronic Trackball	39
Kensington Expert Mouse	99

MISC.

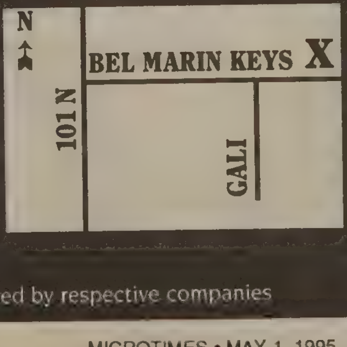
Hayes Accura 14.4 Fax/Modem	$99
Colorado Trakker 350MB	389
Colorado 700MB Tape Backup	250
Various Cables/Adapters	CALL
Heat Sink w/Fan	10
Printer Auto Switch	19
Joystick	from 15
SMC Elite Combo	99
SMC PCI Ethernet	169
3COM 3C509	89

BCS★A
COMPUTERS

385 Bel Marin Keys Blvd, Novato, CA 94949
Hours: M-F 10:00am-6:00pm • SAT 11:00am-4:00pm

Tel: (415) 382-1BCS
(415) 883-7392
Fax: (415) 883-8104

MasterCard VISA



*Dealer Inquiries Welcome • *Volume Discount Available • *Price subject to change w/o notice • *Trademarks are registered by respective companies

Creative Control With Bryce And Convolver

HSC's Graphics Tools Unleash New Capabilities

Graphics wizard Kai Krause's team at HSC Software is well known for Kai's Power Tools (KPT), a set of extensions and filters that work with Adobe Photoshop, Fractal Design Painter, and Corel Photo-Paint 5. With clicks of the mouse, you can create an infinite array of dazzling gradients, fractals, and textures to apply to text, backgrounds, surfaces, and objects.

What set KPT apart from other graphics manipulation sets was not only the exploding bounty of effects it could produce, but its interface. The user interface is regarded and presented as a functionally aesthetic instrument unto itself, embracing and enlightening the user. This design philosophy has been extended to all of the HSC products.

BRYCE—LANDSCAPES OF THE GODS

To see an image from HSC's Bryce—dramatic landscapes both naturalistic and fantastic—and to be told that it was generated by computer graphics wouldn't be surprising.

What's more remarkable is that it was not done on a mainframe or at least a Silicon Graphics Onyx, but on a standard color Macintosh (with FPU and 6MB minimum). The second surprise is that the software lists at $199. Which is like finding a Fender Stratocaster at that price.

Instead of naming the application something like "3-D Ray-Tracing Environment Generator"—which it is—Krause named it Bryce, after Bryce Canyon in Utah, a place that exemplifies the awesome terrain modeling and rendering at which the software excels.

Most 3-D modelers are polygon-based additive programs that can build, extrude, and extract up from geometric primitives. Creating naturalistic textures is more difficult for all but the more advanced applications.

Bryce comes at the problem from the other direction. It is a deeply rich naturalistic modeler and renderer that can be used in limited ways for other purposes. That is, you can use Bryce for texturing text and objects, and you can build compositions that look like structures from its own graphic primitives, but it does not claim to be a full creation program.

Part of the value of the package is a CD-ROM with a library of more textures, and galleries of examples of what people have done with Bryce. As the algorithms can be addressed to translating value differences in color and grayscale to height difference, you can see eerie turns of imaging—e.g. the George Washington portrait from a dollar bill translated into a Georgian landscape version of Mt. Rushmore.

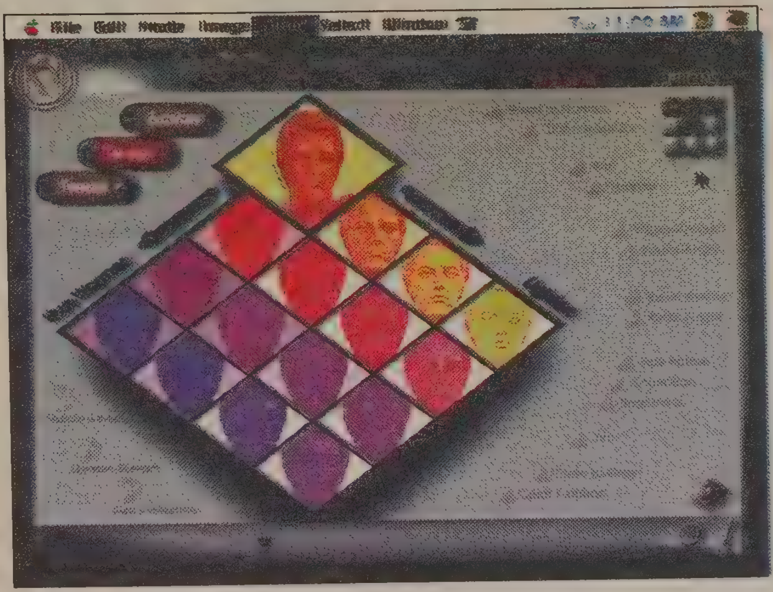
As with most Mac programs, you can go pretty far by instinct, following the nose of your mouse. But I found that following the stages set forth in

BY TONY REVEAUX

CREATIVE CONTROL WITH BRYCE AND CONVOLVER *continued...*

the manual is the best way to keep clear. The sophistication and power of the math working under Bryce feels like using the lid of an atomic reactor as an Etch-a-Sketch. A professional mode can be accessed through the preferences, which will allow advanced graphics users to tweak things even further.

You can select and use the different operations of Bryce through the sculpturally explicit palettes. The Create Palette contains all the objects needed to create grounds, seas, and mountains; the Sky & Fog Palette governs KPT Bryce's virtual environment; the Edit Palette allows you to select and edit all the objects created; and the Render Palette has all the controls specific to rendering, such as setting the size and resolution for the final image. It also includes the render timer, displaying the estimated time needed to complete a rendering operation. For ambitious compositions, nights and weekends may be needed to devote to computer grind-time.



As you go further into the menus for selecting textures, materials, colors, reflectances, alpha channels, light sources, bump gain, PICT mapping, filters, clipping, diffusion, refraction, illumination, and much, much more, these actions are still made accessible. Most are scrolled and manipulated with click-and-drag controls, and preview modes are clear, illustrative, and instantly responsive.

Bryce, like Photoshop and Fractal Painter, is one of those programs that has an entry point and a familiarization level, but no end in sight to the extent and range of its uses.

CONVOLVER

HSC's KPT Convolver (from "custom convolution kernel") is an advanced image processing tool for generating custom sharpen, blur, posterization, and other effects. It is now available for Windows/Windows NT as well as the Macintosh/Power Macintosh original version ($199).

Efi's
DISCOUNT COMPUTERS

JUST A SAMPLE

3Com®
AST Research Inc.
Canon
Samsung
Mitsubishi Electronics
Toshiba
intel
Zenith data systems Groupe Bull
NEC
Iomega
Acer

- Mitsumi Quad CD w/16 Bit Sound Card $229
- Mitsumi Enhanced 101 Keyboard $25
- Citizen PN 60 Notebook Printers .... New $310
- Stealth 64 Local Bus or PCI w/2MB VRAM $289
- Pertical Per. 28.8 Fax Modem $209
- Micro Solution Quad CD via Parallel Port $339
- PCMCIA 14.4 Fax Modem $169
- MAG 15"/17" Monitor $355/650
- Hayes Accura 14.4 Fax modem Int .. $95
- CTX 17" Monitor .27 NI $629
- Canon BJ 200E/LBP 430 ...... $229/569
- Canon BJC 600E Color .... New $489
- OptiQuest 17"/20" Monitor $595/1225

LOWEST PRICES ON ALL AST & CANON PRODUCTS GUARANTEED!

altima
OKIDATA
IBM
SCO
ALR
ALPS America
Panasonic
EPSON®
Hewlett Packard
Hayes
Citizen
Novell

Fax for inquiries, price bids & purchase orders: (510) 283-1744
Free delivery and installation of systems within 30 miles. Free in-store installation of any product.
CALL US FOR YOUR PRICE ON ANY PRODUCT.
HOURS: MON-FRI. 9-5, SAT. 9-1
3441 GOLDEN GATE WAY, LAFAYETTE, CA 94549
(510) 283-1700
CALL BEFORE YOU BUY
We are actively seeking minority businesses supplying computer products. Please Call!
Prices may change without notice. 90 day warranty on all products.

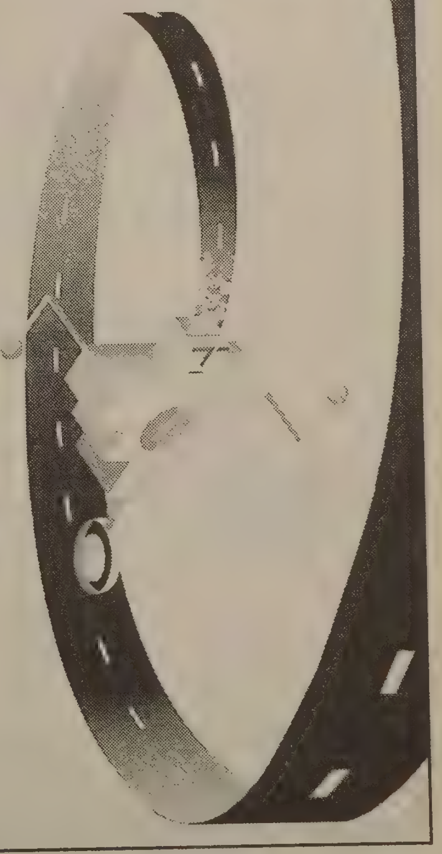
CENTER FOR ELECTRONIC ART

WE'RE MOVING!

GRAND REOPENING
APRIL 1ST
NO FOOLING

NOW- TWICE THE SIZE AT
250 - 4TH STREET
ANSEL ADAMS CENTER

415 956 6500
info@cea.edu



LEARN
INTERNET
MULTIMEDIA
DESKTOP PUBLISHING
COMPUTER GRAPHICS
ANIMATION

CENTER FOR ELECTRONIC ART

CREATIVE CONTROL WITH BRYCE AND CONVOLVER *continued...*

Convolver is designed like a graphic instrument, or "virtual mixing board," that can be played and improvised upon, instead of asking you to address opaque mathematical control tables. The intuitive interface allows you to "scrub" across its diamond grid to achieve subtle and smashing effects with color "genes" and "mutations."

Convolver's color is tweaked with a pop-up rainbow disk which has a virtual control boundary that extends beyond the disk to the edges of the window. When asked why he bothered to build a designed interface with 3-D buttons, decorative disks, and shadow details, the irrepressible Krause replied: "Why not?" But for the mental well-being of those Desktop Puritans, he provides the option of plain black-and-white Mac menus with Chicago fonts. The only thing Convolver doesn't have is a "light organ" parallel mode of musical tones that can play corresponding to chroma and saturation.

Because of the fine control of contrast and sharpening angles, Convolver can be used to do very heavy-duty image correction and modification. One demonstration I saw showed how it out-CIAed the CIA in analyzing satellite photos, where you go in deeper and deeper until you can just about read that license plate on the suspected terrorist's jeep in the desert.

The three modes of Convolver are Explore, Design, and Tweak. Because of the diamond grid of successive variations of the central operation, you are able to see the many variations of what you've got in fifteen radial tiles rather than guessing, or scrolling through them one by one. It shows you in what directions you can guide your explorations.

RESOURCES:

HSC Software
6303 Carpinteria Ave.
Carpinteria, CA 93013
(805)566-6200

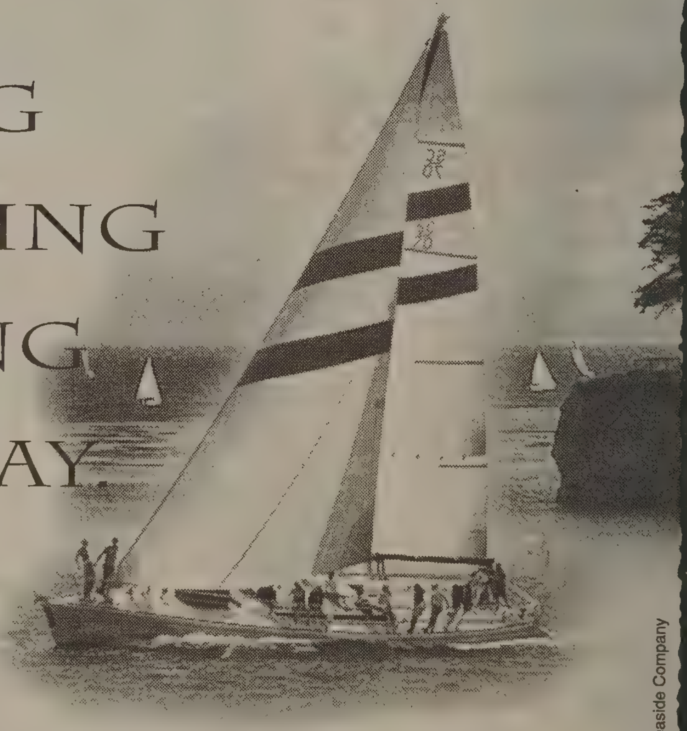
Adobe Press
Hayden Books
1171 North College Ave.
Carmel, IN 46032

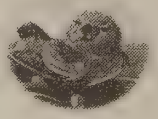
Ziff-Davis Press
59093 Christie Ave.
Emeryville, CA 94608
(510)601-2000

In the design mode, you can seek and modify effect level, blur/sharpen, edge detection, edge angle, relief, hue rotation, saturation, brightness, and contrast. Once you find something you think you like, you can further explore and modify it in the tweak mode. It invokes most of the actions of the design mode, adding tint and fade to gray, and sub-modes of linear convolution, unsharp/Gaussian, radius, threshold, and difference mask.

Remember, Convolver is a plug-in to a host program like Photoshop and Fractal Painter.

continued on page 286





THE ONLY THING
BETTER THAN SURFING
THE NET IS SAILING
THE MONTEREY BAY.

Pack the Powerbook, forget the coat and tie and set your course for the Santa Cruz Yacht Harbor to board the sleek 70-foot yacht Chardonnay II for a unique business meeting venue.

The Chardonnay II is specially designed for corporate charters, conferences, meetings and entertainment.

Meeting amenities include CD and tape players, VCR and large screen TV as well as a caterer's galley.

There is comfortable lounge seating below deck and deep cockpit seating topside.

Licensed, insured and Coast Guard inspected.
Chardonnay II
Sailing Charters

Call for private or public sailing excursion information. (408)423-1213

©1995 Santa Cruz Seaside Company

NEW ALAMEDA LOCATION

FCS

FUTURE
COMPUTING
SOLUTIONS
INCORPORATED

In Touch with Tomorrow
TOSHIBA

SHARP
Authorized Dealer

NEC
Authorized Dealer

AST
Authorized Dealer

T4900CT: The Advanced Multimedia Notebook

- ❖ Blazing Fast 75MHz Intel Pentium
- ❖ Multimedia Ready: 16 bit WAV & MIDI Audio, built in Microphone and Speaker, Audio Jacks, and Pre-installed Windows Sound System.
- ❖ 810MB Hard Disk Drive
- ❖ 8MB of Standard RAM
- ❖ Pentium 75MHz

75MHz $5398

T3600CT

50MHz, I486DX2,
PCMCIA
Active Color

250MB $3298
500MB $3698

• Installation •
Service • Support •
Novell Certified NetWare Engineer
• Administration •
• Training •

- ❖ Novell Certified Engineer
- ❖ Complete Hardware & Software System Integration
- ❖ Network Upgrade & Maintenance
- ❖ Cabling

The Ultimate Combination of Sight, Sound & Processing Power in a Notebook Computer

T4800CT

75MHz, i486DX4, 8MB,
Active Color,
2 PCMCIA Slots

510MB $3498

T4700CT

50MHz, i486DX2, 8MB,
Active Color,
2 PCMCIA Slots

320MB $3098

T4850CT 510/810 . . . .$3798/3948

T2150CDS

NEW **$3498**

T2150 CDT

$4698
DX4, 75MHz, 8M,
Built-in CD ROM Dr.

T1960CS

50MHz, i486DX2, 4MB,

320MB $2098

T1960CT

200MB $2098
320MB $2198

T 4400SX

25MHz, 486SX, 2MB, DX
Upgradable Notebook

80MB $898*
120MB $998*

*Factory Refurbished

Ultra Portable Notebook

T2450CT

75MHz, i486DX4, 8MB,
Dos, WIN, Mouse, SCSI,
PCMCIA, Active Color,
500MB

320MB $3398
500MB $3698

T3400CT

33MHz, i486SX, 4MB,
PCMCIA, 4.4 lbs.,
Active Color

120MB $1798
250MB $2098

T6600C

Advanced Portable Computer
66MHz, i486DX2, 8MB,
Active Color
510MB

$CALL
510MB-CD
$CALL

T1910CS

33MHz, i486SX, 4MB,
DOS, Win, Mouse,
PCMCIA, Mono/Color

200MB $1348
200MB/CS $1698

T4400DXC

1486DX, 25MHz, 9.5" ActiveColor

200MB $1898

T4500C

1486SX, PCMCIA, Active Color

120MB $1498*
200MB $1598*

*Factory Refurbished

T6400MM/C

Advanced Multimedia
Computer, 50MHz,
i486DX2, 4MB, Active
Color, Mambo Card,
Multimedia Software,
Speakers, Samsonite Case

200MB $4998

T1900

Mono/Color
20MHz, 486SX, 4MB, DOS,
Win, Mouse, Claris Works,
Lotus Organizer, Case

120MB $1098*
120MB/C $1298*

*Factory Refurbished

T2400CT

50MHZ, i486DX2, 8M,
DOS, Win, Mouse, SCSI,
¡PCMCIA Slots Active Color

250MB $2898
320MB $2998

T2400CS

50MHZ, i486DX2, 4M,
DOS, Win, Mouse, SCSI, ¡
PCMCIA Slots, Color

250MB $2448
320MB $2548

T1950CT

40MHZ, i486DX2, 4M, DOS, Win,
Mouse, PCMCIA, Active Color

200MB $1998*
320MB $2198*

T1950CS

200MB $1898*

*Factory Refurbished

T4700CS

50 MHZ, i486DX2, 8MB,
Color, 2 PCMCIA Slots,

200MB $2698*
320MB $2798*

*Factory Refurbished

Mon.-Fri. 8-5
Closed Sat.-Sun.

Future Computing Solutions Inc.
1104 Bismark Lane, Alameda, CA 94502
Tel: 510/337-9034 • Fax: 510/337-9036

Advertised Prices Reflect 3% Cash Discount. Corporate & Aerospace Purchase Orders accepted. Prices & Availability subject to change without notice. Additional discounts to qualified faculty & research staff. FCS is not responsible for any typographical errors. Apple, the Apple logo, Appletalk, LocalTalk, Macintosh, Centris, Duo, Powerbook, and Quadra are trademarks of Apple Computer, Inc.

SneakerNet *

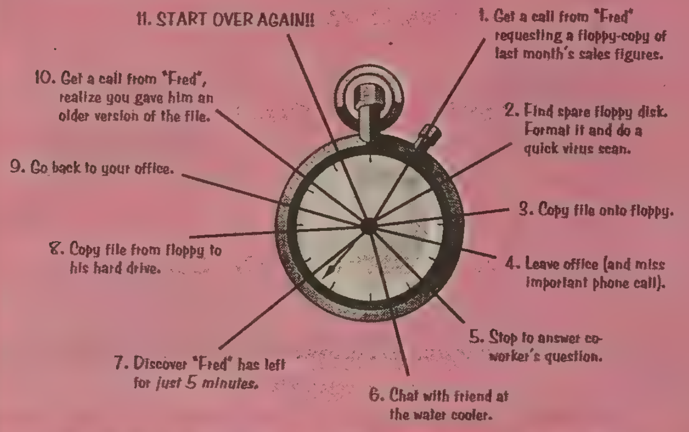
vs.

THE CHALLENGE:
SHARING A DOCUMENT
WITH "FRED".

Easy Net *

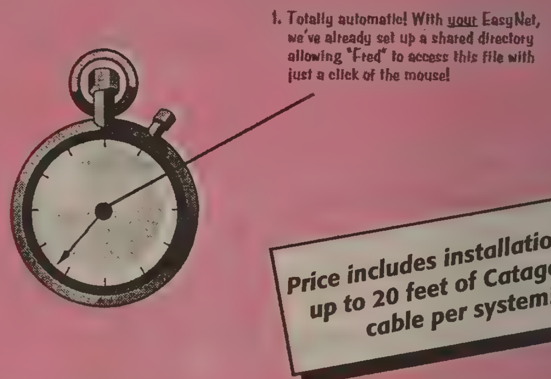
by NOW

* **Sneak'er•Net** (sneek'ĕr-net) *v.* 1. the act of physically tranfering a file by means of walking from the origination point of said file to the destination point. 2. *n.* the implementation of multiple computers in a manner that ensures being surpassed by the competition.



11. START OVER AGAIN!!
1. Get a call from "Fred" requesting a floppy-copy of last month's sales figures.
10. Get a call from "Fred", realize you gave him an older version of the file.
2. Find spare floppy disk. Format it and do a quick virus scan.
9. Go back to your office.
3. Copy file onto floppy.
8. Copy file from floppy to his hard drive.
4. Leave office (and miss important phone call).
5. Stop to answer co-worker's question.
7. Discover "Fred" has left for *just 5 minutes.*
6. Chat with friend at the water cooler.

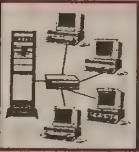
* **Easy•Net** (ee'z-net) *n.* 1. the first **easy-to-use** Local Area Network solution for small to medium-sized businesses.



1. Totally automatic! With your EasyNet, we've already set up a shared directory allowing "Fred" to access this file with just a click of the mouse!

Price includes installation and up to 20 feet of Catagory 5 cable per system!

[illegible]et 100Mbps Solution
[illegible]phics/CAD Users



EasyNet 10Mbps Solution
For Small to Medium-sized Companies

Server and Network Components

- Pentium 100MHz
- Triton Chipset
- 32MB RAM
- 2.1GB Fast/Wide SCSI
- Adaptec 3940W PCI
- 4X Toshiba CD-ROM
- 1.44MB FD
- PCI Video Card 1MB
- 101 Keyboard
- 14" Monitor
- Full-tower 300W w/doors
- PCI Intel EtherExpressPro 100Mbps
- **NetWorth FastPipes 100Mbps** 8-ports Hub
- HP 2-4GB Tape Backup w/software
- APC-1250 Smart UPS with PowerChute
- Windows NT or Novell Netware 4.1

$8995

Server and Network Components

- Intel 486DX2/66MHz
- 16MB RAM
- 1.0GB SCSI
- Adaptec 2842VL
- 2X SCSI-2 CD-ROM
- 1.44MB FD
- Video Card
- 101 Keyboard
- Mouse
- 14" SVGA Monitor
- Tower Case 250W
- 10BaseT Network Card
- 700MB Tape Backup w/Software
- 8-port 10BaseT Hub
- APC Surge Protector
- Windows NT or Novell Netware 4.1

$3995

Workstation: We will custom build your workstations according to your specifications or needs. Please call for more details.

AT&T
Global Information Solutions
Authorized Reseller

GET move USE IT

We now carry the full line of AT&T Products:

Globalyst™ Desktops and Notebooks:
Globalyst™ 200, 515, 580, 590

SMP Servers:
AT&T 3404, 3416XL and 35XX Series

Video Conferencing:
Vistium1200 and Vistium1300

THINGS THAT MAKE YOU GO HMMM!!! NO. 6

EDO (Extended Data Output or Hyper-Page Mode) DRAM is a new type of RAM that promises a 20-30% increase in performance over regular DRAM. Fast-Page Mode DRAM used in today's PCs introduces too many wait-states, whereas EDO allows memory operations to be performed in fewer clock cycles. As an example, EDO memory has the ability to load data at the same time it is switching to a new address, rather than having to wait between these operations as is the case with standard DRAM. When EDO is coupled with an advanced Chipset such as Intel's *Triton,* EDO boosts the data-transfer bandwidth to greater than 100MB/second data streaming between the PCI bus and memory. This type of throughput will be necessary for a new class of *Native Signal Processing* (NSP) applications, which would include sound playback/mixing and video conferencing. Another main attraction of EDO is that it paves the way for cacheless systems, cutting the cost of PCs even more. All of our Triton-based Pentium systems are EDO ready.

The **TRITON** chipset, Intel's third generation Pentium chipset, includes several new architectural innovations that were not available on the previous *Neptune* and *Mercury* chipsets. They include: 1) Supports EDO memory and pipeline burst SRAM, which provides greater than 100MB/second PCI streaming data throughput to the memory, 2) Supports the Enhanced-IDE Mode 4 and 5 interfaces which provide data throughput of greater than 20MB/second and Bus Mastering capabilities (which cuts CPU overhead by more than 20%), 3) Enhanced Plug-and-Play utilities which increase performance by transforming ISA cards into pseudo-PCI devices. Unlike the Neptune chipset, Triton-based systems will not support dual or multi-processor architecture, although future chipsets, such as the *Orion,* will support such architecture. Many of our Pentium systems are based on the Triton chipset.

UltraSCSI and **Fiber Channel** are two evolving SCSI interfaces that boast data transfer rates (DTR) of 40MB/second and 100MB/second respectively. **UltraSCSI,** which will be available this fall, improves performance by providing faster clock cycles and the arbitration of SCSI commands. UltraSCSI is backward compatible with previous generations of SCSI standards, which makes migration simple. Available in the first quarter of 1996, **Fiber Channel SCSI** uses the SCSI protocol over serial connections in a loop configuration that will provide a transfer speed of up to 100MB/second. In addition, other advancements such as *Magneto Resistive* (MR) heads, *Glass-coated media,* and *Partial Response Maximum Likelihood* (PRML) are all new technologies that will increase capacities and improve performance of next generation hard drives.

NOW
NOW ELECTRONICS, INC.
e-mail: sales@nowelec.com

SAN FRANCISCO
TEL: 415/398-8106
SANTA CLARA
TEL: 408/654-9464
SAN MATEO
TEL: 415/345-4577

WARRANTY AND SERVICE

1. One year parts and labor standard from NOW
2. One year On-Site service for corporations w/in area codes 510, 415, 408
3. Systems with GE logo could carry an extra three years parts and on-site service warranty for an additional 4% charge
5. Life-time technical support and advice
6. 30-days satisfaction money back guarantee

NOW *MORE THAN EVER!*

MORE POWER, MORE STORAGE, MORE OPTIONS, MORE VALUE...

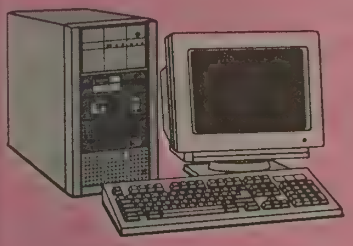
90 DAYS SAME AS CASH

Xpress Station

Low Cost, High Performance

Neptune/Triton Chipset, 15" Flat Monitor

If you are looking for a low cost Pentium-powered system that combines the best name brand components and the highest performance, look no further than our new Xpress series. Designed for those who strive for power but are restrained by a tight budget.



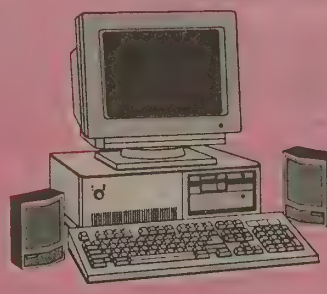
- Intel Pentium Processor
- Intel Neptune/Triton 64-bit PCI Motherboard
- 256KB Asynchronous (or pipeline burst) Cache
- 8MB 72-pin RAM up to 128MB (EDO Ready)
- 540MB E-IDE Western Digital 12ms
- 1.44MB High Density Floppy Drive
- 15" MAG DX15F .28dp Flat NI Monitor
- Diamond Stealth64 64-bit PCI 2MB RAM
- Deluxe Mini-tower Case w/200W PS
- 101 Enhanced Key Tronic Keyboard
- Microsoft Ergonomic Mouse
- DOS 6.22 & WFW w/Manuals

P75....$1995 $65/mo.
P90....$2195 $71/mo.
P100..$2395 $78/mo.

HomeMedia

The Best Multimedia/Home PC

Inspire your whole family with this low cost, high performance Multimedia PC. It provides you with all the tools necessary to explore the world of multimedia and the information superhighway.



- VLB/PCI Green Motherboard
- 8MB RAM, 256KB Cache
- 540MB E-IDE Western Digital 12ms
- 1.44MB High Density Floppy Drive
- 15" MAG Flat .28dp NI Monitor
- Diamond Stealth64 1MB Video
- Desktop or Tower Case w/200W PS
- 101 Enhanced Keyboard
- Logitech high-resolution mouse
- US Robotics Sportster 14.4K F/M
- Creative Labs Sound Blaster 16 Card
- Double Speed CD-ROM Drive
- High Performance Stereo Speakers
- DOS 6.22 & WFW 3.11 w/Manuals

DX2/66 VLB....$1795 $58/mo.
DX4/100 VLB.$1850 $61/mo.
P66 PCI...........$2095 $69/mo.
P90 PCI...........$2395 $78/mo.

PowerMedia

Powerful Multimedia System

PowerMedia makes a perfect combination of great performance and great price. Powered by Pentium processor, 16MB of RAM, hefty hard drive, Quad speed CD and the speedy 28.8KB modem. PowerMedia is your ultimate PC to zoom through the most complicated and power hungry applications.

- Intel Neptune/Triton PCI Motherboard
- 16MB RAM, 256KB Cache
- 1.0GB E-IDE Western Digital 10ms
- 1.44MB High Density Floppy Drive
- 17" MAG DX17F .26dp Flat NI Monitor
- ATi Mach64 PCI 64-bit 2MB VRAM
- Deluxe Medium-tower Case w/230W PS
- 101 Enhanced Key Tronic Keyboard
- Microsoft Ergonomic Mouse
- US Robotics Sportster 28.8K V.34 F/M
- Creative Labs Sound Blaster 16 Card
- Quad Speed CD-ROM Drive (600KB/sec)
- 120 Watt High Performance speakers
- DOS 6.22 & WFW 3.11 w/Manuals

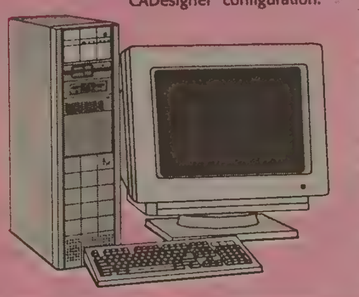
P75... $3395 $110/mo.
P90....$3595 $117/mo.
P100.$3795 $123/mo.

CADesigner

AutoCAD Station

100MHz Pentium, Triton Chipset, Sony 17" Monitor, #9 Imagine 128-bit

AutoCAD users are very particular about the components that go into their systems. Therefore, we've conducted a survey on our large number of AutoCAD users including Architects, 3D designers and Engineers regarding the "ideal" AutoCAD system configuration. The outcome of the survey is our new "CADesigner" configuration.



- Intel Pentium 100MHz Processor
- Intel Triton Chipset PCI Motherboard
- 256KB Cache (Asynchronous or pipeline burst)
- 32MB RAM up to 128MB (EDO Ready)
- Seagate 850MB Fast ATA-2 16.7MB/s
- Bus Mastered PCI Fast ATA-2 16.7MB/s
- 17" Sony .25dp 1280x1024 Monitor
- #9 128-bit Imagine PCI 4MB VRAM
- Deluxe Full-tower Case w/250W PS
- 1.44MB High Density Floppy Drive
- 101 Enhanced Key Tronic Keyboard
- Logitech Ergonomic MouseMan
- DOS 6.22 & WFW w/Manuals

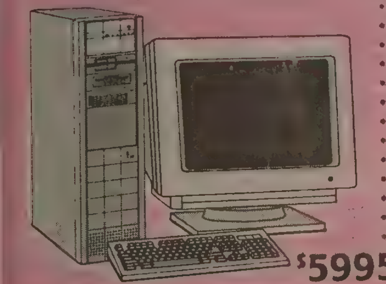
$4295 or $140/mo.

GraphicsComposer

Graphics/Desktop Publishing Station

192-bit FireStorm 6MB Video Card, SyQuest Removable Cartridge Drive
NEC XP17 1280x1024 Monitor

For the power-hungry graphics and desktop publishing users, look no further than our new GraphicsComposer. The days of working with huge files that bog down the system's performance are over. Our GraphicsComposer station is powered by the fastest video card in the industry - FireStorm 192 by Radius - built with three separate 64-bit GUI processors and 6MB of RAM dedicated for graphics files only. We are confident that this station will quench your thirst for power.



- Intel Pentium 100MHz Processor
- Intel Neptune/Triton Motherboard 2
- 32MB RAM, 256K Fast Cache
- Quantum Empire 2.1GB Fast SCSI-3 8ms
- Adaptec 2940 PCI Fast SCSI-3 Controller
- SyQuest 105MB SCSI Internal Drive
- 17" NEC XP17 1280x1024 75Hz Monitor
- FireStorm192 192-bit PCI 6MB 1600x1280
- Deluxe Full-tower Case w/300W PS
- 1.44MB High Density Floppy Drive
- 101 Enhanced Key Tronic Keyboard
- Microsoft Ergonomic MouseMan
- DOS 6.22 & WFW w/Manuals

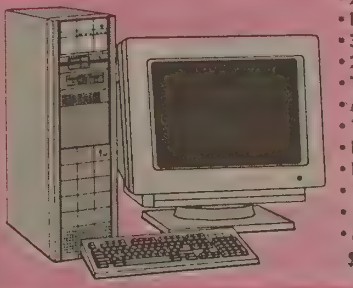
$5995 $195/mo. Dual Pentium 100MHz add $1000

TWINStation

Twin Processors, Twice the Power

Dual 100MHz Processors, Seagate Barracuda Fast/Wide, "New" Adaptec 3940W Controller

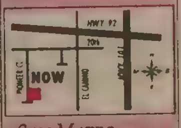
Take full advantage of Windows NT multi-threading & multi-processing capabilities with our new TwinStation system. By installing two Pentium processors Windows NT divides its work between both processors, performing true multitasking operations which doubles the performance of the 32-bit applications. Think of this station as *your car* powered by two Ferrari engines running simultaneously to get you back and forth from home to work!



- 2 *(Twin)* Pentium 100MHz Processors
- EISA/PCI SMP Neptune 64-bit Motherboard
- 32MB 72-pin RAM up to 512MB
- 2.1GB Seagate Barracuda 7200rpm Fast/Wide
- Toshiba 3501B 4x SCSI-2 CD-ROM
- Adaptec 3940W PCI Fast/Wide SCSI-2 (40MB/sec)
- 17" IDEK VisionMaster .26dp 1600x1280 Monitor
- Diamond Stealth64 64-bit PCI 2MB VRAM
- Deluxe Full-tower Case w/300W PS
- 1.44MB High Density Floppy Drive
- 101 Enhanced Key Tronic Keyboard
- Microsoft Ergonomic Mouse

$6495 $210/mo.

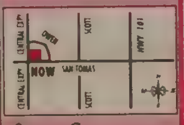
SAN MATEO
TEL: 415/345-4577
FAX: 415/345-4576
2031 Pioneer Court Ste. 2
San Mateo, CA 94403
Hours: M-F 10-6:30



SAN MATEO

SAN FRANCISCO
TEL: 415/398-8106
FAX: 415/398-8239
425 Battery Street, Ste. 210
San Francisco, CA 94111
Hours: M-F 10-6:30

SANTA CLARA
TEL: 408/654-9464
FAX: 408/654-9463
2370 Owen Street
Santa Clara, CA 95054
Hours: M-F 9-6



SANTA CLARA

NOW
NOW ELECTRONICS, INC.
e-mail: sales@nowelec.com

Touch Screens

Resistance High Quality 14" Monitor only $655

HighNote Notebook Model 9400

- Intel 486DX2-66MHz
- 128K Cache
- 4MB RAM Expandable
- 340MB Removable Hard Drive
- 10.3" Color Display
- 32-bit VESA Local Bus Video
- 1MB Video RAM with Win Accelerator
- PCMCIA III & II Slots
- Mouse, Case, Dual Battery

Plus Much More!

Sale Price $2750 Color

Repair Specialists

If it's a compatible computer or printer, we can fix it!

- **Over 10 years experience**
- **Complete Insurance Repairs**

Monitor Repairs

Monitor Repairs Starting At $65 plus parts

Monitor Alignment & Adjustment $50

Cellular Phones & Pagers
New Computer Systems Available

BACKYARD COMPUTER SERVICES
Over 10 Years Experience · Serving the Entire Bay Area · Free Parking in Rear of Store
(510) 689-3733 · 1842 Colfax St., Concord, CA 94520

POWERFUL PORTABLES
From Songtech International

Create Your Own Portable PC
Use The PCIII Portable "SKD" Computer Case to create a Power Portable that meets any requirements you may have. Build a Portable Multimedia PC. The Toshiba TFT Screen provides the speed and color quality you need. There is ample room for an internal CD-ROM. Build a Portable File Server. The 6 Expansion Slots in combination with capabilities of having up to 4 internal Storage Devices, make our Portable the ultimate for the Network Installer. Technical Scientific Departments love our Portable which uses Full Length Boards and is frequently used as a Portable Measuring Instrument.

VGA COLOR LCD

- 512 Colors (TFT)
- 9" or 10" VGA Screen 640x480
- 6 Expansion Slots
- Accepts Any Baby Size Motherboard
- Paper White, Passive Color & Active Color Also Available
- Any Performance Ext. VGA Monitor
- 4 Drive Bays For Storage Devices
- Simultaneous Ext. CRT Display
- Detachable 102/103 Keyboard

CALL FOR PRICING & MORE INFORMATION
SONGTECH INTERNATIONAL
46560 Fremont Blvd. #106
Fremont, CA 94538
(510) 770-9051
Fax: (510) 770-9060
Dealer Inquiries Welcome

CREATIVE CONTROL WITH BRYCE AND CONVOLVER

continued from page 282

Once you start with it, you may realize that your brain has become one of the hosts that it is plugged into.

READING UP ON COMPUTER GRAPHICS

If you numb out trying to understand just what's going on between the pixels with all of these dazzling effects and processes you experience with these programs, try Jeff Prosise's *How Computer Graphics Work* (Ziff-Davis Press, $24.95) for ocular-mental relief. One of the extensive series of illustration-driven How It Works books from Ziff-Davis, computer graphics is certainly a topic that needs pictures.

Prosise covers and clarifies many of the more abstruse and knotty principles and operations, as well as the basic concepts. He positions computer graphics in everyday use such as video games and computer-aided design, and lays bare the fundamentals of text, fonts, color, and resolution. In image processing and three-dimensional modeling and rendering, we can really see how compression, ray tracing, and solid modeling work. The explanations of morphing and fractals are especially interesting. This could be improved with a CD-ROM to demonstrate time-based processes.

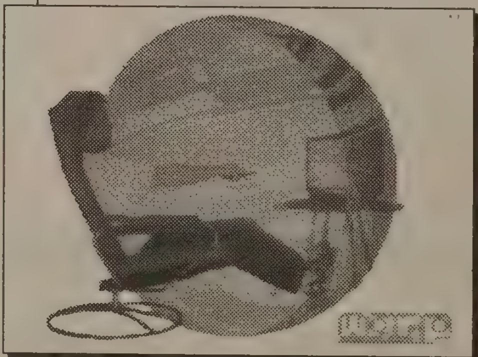
Professional Studio Techniques: Imaging Essentials by Cohen, Brown, and Wendling (Adobe Press, $39.95) is a good introduction to application-oriented computer graphics for the designer using tools like Adobe's Photoshop, Illustrator, and Premiere. It provides step-by-step sequences for producing three-dimensional artwork, painting and blending, text effects, special effects, creating files for video, and designing for print. If you are thinking of getting deeper into design, this is a good preview of what it takes to get there.

If you are so giddy with the results of your own personal Convolvotron Lab that you want to take it all the way, this hefty 509-page reference by Miller and Zaucha, *The Color Mac: Production Techniques, 2nd Edition* (Hayden Books, $50), will give you all the specs to go pro. It provides the basics of tone and color and scanning, goes into image manipulation and reproduction, and then into the demanding world of the professional production environment, including video output. See you in print! ■

Copyright © 1995 by Tony Reveaux. All rights reserved.

CORRECTION

For reasons we haven't quite figured out yet, this graphic, which was created by our friends at Warp California Inc. for their Virtual Television (VTV) technology, was separated from the story Tony Reveaux did on the company in issue #134 and instead ran without attribution in Tony's story in issue #133.



We'd like to apologize to the folks at Warp California for this, and thank Eric Gullichsen for bringing the error to our attention. Eric also would like to remind you to check out the company's Web page at *http://www.warp.com/*.

—*eds.*

日本語だから

NEW!

簡単オーダー

Pentium 100 $2,560

Asus TP4 Motherboard
intel Pentium 100Mhz Microprocessor
16MB 70ns SIMM
TEAC 1.44MB 3.5" FDD
TEAC Quad-speed CD-ROM Drive
1.0GB IDE HDD
ATI Mach 64 w/2MB DRAM Video card
Maxi Switch 101 Keyboard
MS Mouse
Pentium Cooling fan & Heatsink
Middle Tower Case w/230W PS

Triton Chip !

円高チャンス

NEW!

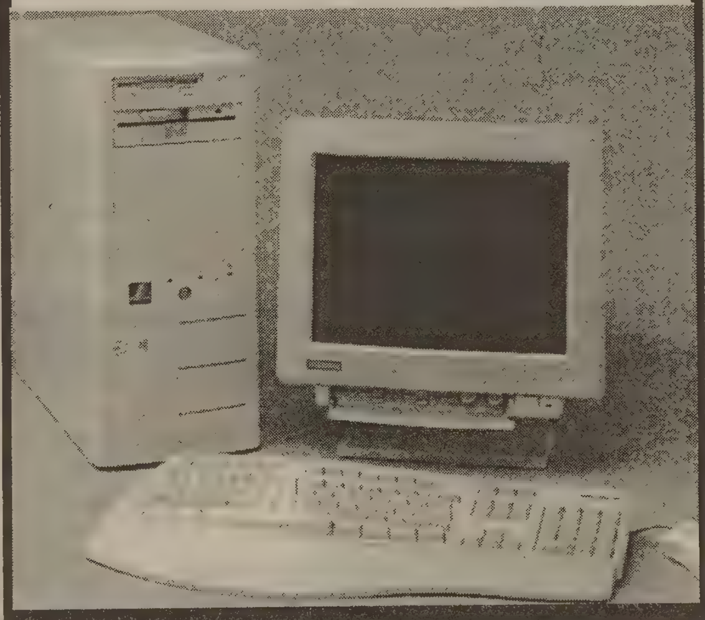
Pentium 90

$2,180

ASUS TP4 Motherboard
intel Pentium 90Mhz
16MB 70ns SIMM
TEAC 1.44MB 3.5" FDD
TEAC Quad-speed CD-ROM
540MB IDE HDD
ATI Mach 64 w/2MB DRAM
Maxi Switch 101 Keyboard
MS Mouse
Pentium Cooling fan & Heatsink
Middle Tower Case w/230W PS

Triton Chip !

シリコンバレーの最先端



Intel!

Pentium 90

$2,230

intel Pentium 100 Motherboard
intel Pentium 90Mhz
16MB 70ns SIMM
TEAC 1.44MB 3.5" FDD
TEAC Quad-speed CD-ROM
540MB IDE HDD
ATI Mach 64 w/2MB DRAM
Maxi Switch 101 Keyboard
MS Mouse
Pentium Cooling fan & Heatsink
Middle Tower Case w/230W PS

マルチメディアシステム
お買い上げのお客様に
ジョイスティックを
プレゼント

Pentium 100 $2,605

intel Pentium 100 Motherboard
intel Pentium 100Mhz Microprocessor
16MB 70ns SIMM
TEAC 1.44MB 3.5" FDD
TEAC Quad-speed CD-ROM Drive
1.0GB IDE HDD
ATI Mach 64 w/2MB DRAM Video card
Maxi Switch 101 Keyboard
MS Mouse
Pentium Cooling fan & Heatsink
Middle Tower Case w/230W PS

Intel!

ATIは、日本語ドライバー付

-BBT, Inc.-*BigBang Technology, Inc.100 Century Center Court, #503, San Jose, CA 95112*
日本語直通ダイヤル：408-453-8425 **Push 14# Fax:408-453-9115**

Terms & Condition: Price & Company policy subject to change w/o notice.
Price reflects cash discount. Not responsible typographical errors.

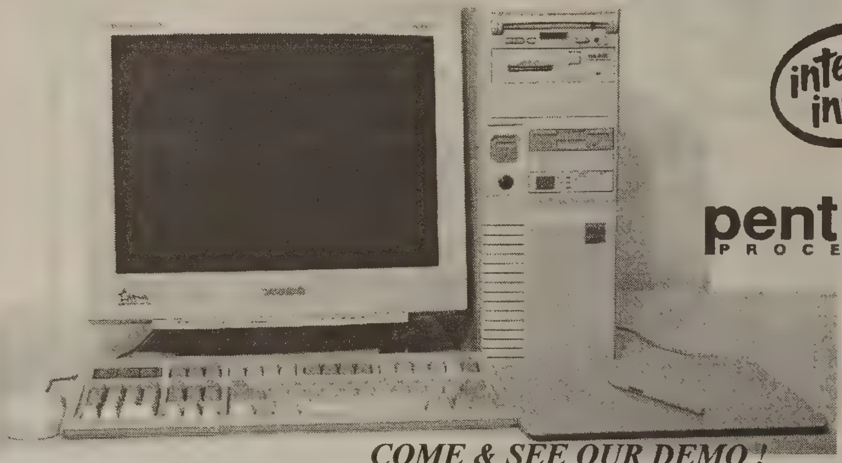
日本からのオーダーお承り致しております。お気軽に日本語にてお問い合わせ下さい。

POWER WORKSTATIONS

PENTIUM 90/100 MHz SYSTEM

- * **Pentium 90/100 MHz Intel PCI** mother board, 256K cache
- * **32 MB** 64bit Memory, upgradable to 128MB on board
- * **1 GB** IDE HDD with built in PCI IDE controller
- * 101 Keytronics Keyboard, 2Serial/1Pararell ports
- * 1.44 and 1.2MB Floppy drives, Middle tower case
- * MS-DOS 6.22 and MS Windows for Workgroup
- * **Free software and hardware Integrations**

$2,795/2,995



intel inside

pentium PROCESSOR

COME & SEE OUR DEMO !

✓ Recommended Option(CAD)

*Matrox MGA Pro w/ Z-buffer
for 3D real-time rendering/rotation
*Digitizer(12X12 to 44X60)
*Large size monitor(17" to 37")
*Plotter
-Pen Plotter(A to E size)
-Inkjet Plotter(A to E size)
-Color or monochrome

✓ Recommended Option(Graphics)

*Matrox MGA II+ PCI with 4MB
VRAM(24bit color @1152X882)
*Scanner
-color or monochrome
-Flatbed or 35mm film scanner
*Dye-sub Color Printer
-Economic Fargo Primera
-Best quality Kodak Colorease PS
*Pressure Sensitive digitizer
*17" or 20" SONY monitor
*Additional 16MB or 48MB RAM

Solaris®

NeXT™

*Solaris X86 ver. 2.4 or NeXT ver. 3.2
***Pentium 90 MHz Intel PCI mother board**
***Diamond Stealth 64 PCI** graphics card, **Toshiba Quad speed CD ROM**
*32MB 64bit Memory, upgradable to 128MB on board
***Adaptec SCSI-II Controller** with EasySCSI software
***1GB SCSI** Hard Drive,101 Keyboard, 1.44/1.2MB FDD
*Microsoft Mouse, Middle tower case /w CPU cooling fan
***SUN Solaris X86 or NeXT O/S Support**

SunSoft
A Sun Microsystems, Inc Business

$4,395

ADD ONLY $1000 FOR DUAL-PENTIUM SYSTEM

Solaris
NEXTSTEP

MICROSOFT® WINDOWS NT™

- * **Pentium 90 MHz Intel PCI** w/ 256K cache, **1 GB** SCSI HDD
- * **32 MB** 64bit Memory, can be upgraded up to 128MB
- * **Adaptec 2940 PCI controller,** Toshiba Quad speed CD-ROM
- * **Diamond Stealth 64 PCI graphics card**
- * 101 Keytronics Keyboard, Microsoft mouse
- * High speed 2Serial/1Pararell ports
- * Middle tower case with 250W power supply
- * **Microsoft NT 3.5** operating system
- * 1.44MB and 1.2MB FDD
- * **Free S/W and H/W Integration**
- * **Add $1000 for Dual-Pentium system**

$4,395

COME & SEE OUR DEMO !

PINNACLE MICRO
THE OPTICAL STORAGE COMPANY™

*** Pinnacle Micro RCD-1000 External CD-ROM writer**
- up to 680MB of data in a CD Double speed, 300KB transfer rate
- including cable and windows-based software, built in 1MB buffer
- support ISO 9660, Red-book audio, multisession,easy to use software

$1,895

*** Pinacle Micro CD-ROM Service**
Lowest service price in town !!!

ONLY $99.00

Roland Sign Making system

- * **IBM Value Point 486DX-33 computer**
- * **Roland CAMM-1 PNC-900 Sign Maker**
  - cut vinyl sign, rubylith, sandblasting stencils, reflectibe vinyls,amberlith film, and friskets
- * **NEC** 3FGx 15 inch color monitor
- * 8MB of memory, Teac 1.44MB floopy drive
- * MS-DOS 6.22 and MS Windows 3.11
- * **Roland Sign Maker Software**
- * 340MB IBM HDD, IBM mouse, keyboard
- * Built-in SVGA graphics card

$5,995

Upgrade Your 286/386 to fast 486/586 computer System

Hercules METHEUS WACOM intel. MICROTEK Better Images Through Innovation. EPSON® Solaris®

GRAPHICS / PUBLISHING

Summagraphics.

SummaJet 2 Series

- * ADI and MS Windows dirver
- * Support HPGL/2, HPGL, DMPL
- * Refillable ink cartridges to save
- * Ethertalk, TCP/IP, Novell
- * Standard 4MB(model 2C) to 32MB
- * 300dpi, 48 hour priority response

$Call

PRIORITY 48 RESPONSE

SummaJet

Kodak

ColorEase Printer

- * 300 dpi Dye-sub Color Printer
- * 16MB RAM and 120MB HDD
- * Adobe Postscript Level 2 built in
- * Windows, Macintosh drivers
- * AppleTalk, EtherTalk(optional), RS232, Centronics,SCSI interface for external font storage.

$5,195

COME & SEE OUR DEMO!

HEWLETT PACKARD

DesignJet plotters

- * 300 to 600dpi inkjet plotters
- * ACAD 10,11,12, and Windows
- * Postscript option available
- * HPGL,HPGL/2,Raster(HP RTL) formats

650C	(D/E)	6075 / 7195
600	(D/E)	4595 / 5295
220	(D/E)	2595 / 3495

COME & SEE OUR DEMO!

FARGO

Primera Pro

- * **300 X 600 dpi resolution**
- * 4 times faster than Inkjet(Thermal)
- * Presentations ,transparencies
- * T-Shirt, mug transfer capability
- * Windows Driver,Apple Interface
- * Photorealistic output Image
- * Deliver rich and vibrant Images
- * Postscript option available

$1,495

COME & SEE OUR DEMO!

TDK

Recordable CD

- * TDK recordable compact disc
- * Up to 74 min. or 650 MB storage
- * Extra protection on writing area
- * One year warranty

$9.95

WACOM

Graphic Tablets

Art Z(6X8)

- * Soft Pressure Sensitive stylus
- * Ideal for graphic design and handwriting input

$175

ArtPad(4X5)

- * With Pressure Sensitive stylus
- * 256 Pressure levels
- * 2540 LPI resolution

$375

COME & SEE OUR DEMO!

CalComp
A Lockheed Company

TechJET plotter

- * Desktop publishing,CAD, Graphics typesetting, B size spreadsheet
- * **360 dpi**, plain paper, transparency film, envelopes, up to 248 cps in draft mode
- * **HP-GL**, ADI ACAD 11 & 12, NeWSprint/Sun, 907, **Windows**, Epson & IBM 24e emulation

$695

COME & SEE OUR DEMO!

Roland
DIGITAL GROUP

Sign Makers

- * Start your own sign making business today with under $2,500
- * Use from 2" to 48" wide materials
- * Sign Maker with Plotter capability
- * 3D precision prototype modeler
- * Vinyl, rubylith, amberlith films, friskets, sandblasting stencils, reflective vinyl ..

$Call

COME & SEE OUR DEMO!

TRUEVISION
A RasterOps Company

The Best Multimedia

- * TARGA+ 16 / 32 / 64
- * ATVista 1M / 2M / 4M
- * Bravado
- * TIPS
- * Truevision 1024 / 32

$Call

USED

Plotters/Printers

- * Calcomp 2036 E size pen plotter
- * Calcomp Raster Master thermal plotter, great speed and accuracy
- * HP DraftPro C-D size pen plotter
- * Mitsubishi G370-10 Thermal line color printer
- * Mitsubishi sublimation color printer
- * seiko colorpoint thermal printer

$Call

MONITORS

* 42" Mitsubishi AM4201R	$ Call
* 37" Mitsubishi Pro 37	$ Call
* 33" Mitsubishi Scan 37	$ Call
* 29" Mitsubishi AM2752A	$ Call
* 21" Mitsubishi Pro 21T	$2,295
* 21" NEC XP21	$2,595
* 21" Viewsonic 21"	$1,745
* 21" Hitachi Accuview PS21	$2,095
* 21" Nokia 445X	$2,595
* 21" Philips 2120DC	$2,395
* 21" Nanao F760iw	$1,995
* 20" Nanao T660i	$2,095
* 20" SONY GDM20SE	$1,895
* 20" Viewsonic 20"	$1,595
* 20" NSA SuperScan 20S	$1,395
* 17" Mag DX17F	$ 785
* 17" NEC 5FGp	$1,095
* 17" Nanao T560i	$1,525
* 17" Nanao F550iw	$ 995
* 17" Mitsubishi Scan 17FS	$ 995
* 17" Nokia 447B	$ 985
* 17" Sony GDM 17SE1	$ 995
* 17" Viewsonic 17E	$ 795
* 15" SONY CPD-15FX	$ 455

Call for other monitors !

PLOTTERS

* Calcomp Drawingmaster Pro	$16,995
* Calcomp Designmate D/E	$1,995/2,995
* Calcomp Techjet D/E	$2,995/3,995
* Calcomp Techjet personal B	$ 645
* Calcomp CCL600 Laser prt.	$3,295
* HP 355 Electrostatic color	$29,995
* HP Designjet 650C/PS E	$9,995
* HP DesignJet 650C D/E	$6,695/7,995
* HP DesignJet 600 D/E	$4,995/5,995
* HP DesignJet 220 D/E	$2,595/3,495
* HP memory 2M/4M/8M	$205/335/625
* HP DraftPro + D/E	$3,195/4,195
* HP 7475A/7550+	$1,495/3,195
* HP Paintjet XL (A-B)	$1,895
* HP Deskjet 1200C	$1,695
* H.I.DMP 162R (A-E)	$4,385
* H.I. HIPLOT 7100 (A-D)	$2,095
* H.I. HIPLOT 7200 (A-E)	$2,995
* H.I. DMP 61/62SP	$1,795/2,395
* H.I. JetPro(A-C)V 50/100	$1,495/1,995
* Enter SP600 (A-B)	$ 695
* Roland SignMaker	$ Call
* Roland GRX350 (A-D)	$3,495
* PacificData InkJet II(A-C)	$1,095

Call for other plotters !

GRAPHICS

* Artist WinSprint 1000i	$ 1,195
* Artist WinSprint XJ1000	$ 1,195
* Metheus 1104+16/256	$995/1,095
* Metheus Premire 2M/4M	$595/795
* Matrox MGA PCI2+ 2M/4M	$445/645
* Matrox MGA Pro 4.5M / V	$1,095
* Matrox 2M VRAM upgrade	$ 250
* Matrox MGA Impression 3/V/H	$ 745
* Vermont Cobra Elite	$ 995
* Super Mac Spectrum 24	$ 945
* TrueVision Targa 16/32/64	$ Call
* STB Pegasus VL 4MB	$ 645

SCANNERS

* Microtek SMaker IISP/IISPX	$795/945
* Microtek ScanMaker IIG(600dpi)	$ 445
* Microtek ScanMaker IIHR	$1,099
* Microtek ScanMaker III	$2,495
* Microtek Slide Scanner 35T	$ 995
* HP ScanJet IIcx/IIP	$995/545
* Nikon Coolscan LS-10	$1,795
* Epson ES-1200	$ 995
* Sharp JX-325	$ 730
* Sharp JX-450/610(12X17)	$4,295/9,895

DIGITIZERS

* Calcomp 44X60 Drawing Slate	$1,895
* Calcomp 36X48 Drawing Slate	$1,695
* Calcomp 18X24 Drawing Slate	$1,295
* Calcomp 12X12/18 DSlate	$245/395
* Calcomp Dwg/Slate9X6(P.Sen)	$ 275
* Summa S. MG2 36X48	$2,995
* Summa S. MG2 24X36	$2,595
* Summa S. FX 12X12/18	$425/725
* Summa S. III 12X12/18	$295/$545
* Kurta XGT 12X12	$ 395
* WACOM 18X25 UD	$2,195
* WACOM 12X12/18 UD	$595/795
* WACOM Art-Z PC/Mac	$375/345
* Wacom ArtPad(4X6)	$ 175

PRINTERS

* Seiko ColorPoint PSX	$4,995
* Seiko ColorPoint PSE	$2,595
* Mitsubishi S3410 (Dye-Sub)	$6,995
* Mitsubishi CHC-746i(11.7X17)	$ Call
* HP DeskJet 560C	$ 559
* Kodak Color Ease	$5,195
* Kodak 450GL(Dye-Sub)	$1,495
* Fargo Primera Pro	$1,495
* Epson Stylus color Ink Jet	$ 595

JEMINI

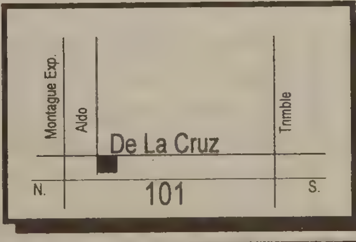
ELECTRONICS

The house of CAD & Graphics Equipment

Business Hours 8AM-6PM(M-F)

3448 De La Cruz Blvd., Santa Clara, CA 95054
Phone (408)727-9986 Fax (408)727-7687
Internet address: jemini@ix.netcom.com

- * Price subject to change without notice
- * Not responsible for typographical errors
- * All trademarks belong to their respective companies



Free Technical Support **New Low Price !** **Please call for other products**

NANAO CalComp A Lockheed Company Kodak InFocus SYSTEMS HEWLETT PACKARD PINNACLE MICRO THE OPTICAL STORAGE COMPANY

Amiga Happenings

New Products And Rumors; Advice If You Just HAVE To Buy A PC

The word on the street is that NewTek will announce at NAB (April) a new version of the Flyer that runs in an IBM-compatible computer. However, since there will be no PC Video Toaster, all of the Flyer transition effects will have to be rendered frame-by-frame.

The Amiga Flyer's ability to do real-time transitions via the Toaster is a big part of its appeal. That competitive edge will be missing with the PC version. This will make it harder to differentiate the Flyer from the hordes of competing products. Furthermore, hype in the PC world runs rampant, so it may be difficult to convince the buying public that NewTek has built a better mousetrap.

AMIGA COMPATIBLE

Also at NAB, MacroSystem of Germany and its US distributor, NoahJi's, are expected to show a working prototype of its '060-based AmigaDOS-compatible computer DraCo. (I am told that they have just received the first five prototype machines.) The main purpose of this product is to provide a home for a special version of its nonlinear product VLab Motion (see last month's Amiga installment).

If they can demonstrate that it will run most of the mainstream Amiga software, it may breathe some much-needed new life into the dying Amiga market. However the '060 chip itself may cause some software incompatibilities. MacroSystem has been talking to Amiga software developers about any necessary code modifications.

The New Fred Fish Disks—Beyond 1000
Amazing AMIGA
The Commodore Game
The Latest Leader?
ESCOM of Germany

They have also reached an agreement with Elastic Reality (formerly ASDG) that will allow ADPro and MorphPlus to be bundled with every DraCo. Their licensing arrangement includes the source code, so perhaps we will see further development of those products, which should benefit all Amiga owners.

I'm told that a video slot could be added to DraCo without much problem or cost. This could provide a new home for the Video Toaster. However, the Toaster software would have to be rewritten using standard OS calls in order for it to be compatible with DraCo, which is a problem. Attempts have been made to work something out with NewTek, but nothing has happened yet. There may be a meeting between representatives of the two companies during NAB.

The great thing about DraCo is that Amiga developers can continue to develop Amiga products. Remember, the question of compatibility should only arise when running Amiga applications on DraCo. If the app runs on DraCo, it should be backwards-compatible with existing Amigas.

BY DOUGLAS J NAKAHIKARA

It's Time to *upgrade* your Computer Systems
to the fastest machine at a very affordable Price !!!

May 1995

INTEL Pentium P5-100MHz

- ✔ **INTEL PREMIERE P5 586-100Mhz**
- ✔ 256KB 15ns Cache, Plato MotherBoard
- ✔ **16 MB of RAM 70ns (72 Pin SIMM)**
- ✔ **Mitsumi 4X EIDE CDROM Drive**
- ✔ **Sound Blaster Pro 16 BIT MCD**
- ✔ **Western Digital 1.2 GIBYTE Fast IDE**
- ✔ 2 HS 16550 UART COM Port, 1P Built-in
- ✔ **Diamond Stealth 64 PCI w/ 2MB Dram**
- ✔ Keytronic 101 Enhanced Keyboard
- ✔ **Full Tower Case** w/ 250 Watt P.S.
- ✔ TEAC 1.44 MB - Microsoft Mouse

$2,690

INTEL Pentium P5-90MHz

- ✔ **INTEL PREMIERE P5 586-90Mhz MB**
- ✔ 256KB 15ns Cache, Plato MotherBoard
- ✔ **16MB of RAM 70ns (72 Pin SIMM)**
- ✔ **Mitsumi 4X EIDE CDROM Drive**
- ✔ **Sound Blaster Pro 16 BIT MCD**
- ✔ **Western Digital 1.2 GIBYTE Fast IDE**
- ✔ 2 HS 16550 UART COM Port, 1P Built-in
- ✔ **Diamond Stealth 64 PCI w/ 2MB Dram**
- ✔ Keytronic 101 Enhanced Keyboard
- ✔ **Full Tower Case** w/ 250 Watt P.S.
- ✔ TEAC 1.44 MB - Microsoft Mouse

$2,280

INTEL Pentium P5-75MHz

- ✔ **INTEL PREMIERE P5 586-75Mhz MB**
- ✔ 256KB 15ns Cache, Plato MotherBoard
- ✔ **8MB of RAM 70ns (72 Pin SIMM)**
- ✔ **Mitsumi 4X EIDE CDROM Drive**
- ✔ Teac 1.44 MB Floppy Drive
- ✔ **Western Digital 1.2 GIBYTE Fast IDE**
- ✔ 2 HS 16550 UART COM Port, 1P Built-in
- ✔ **Diamond Stealth 64 PCI w/ 2MB Dram**
- ✔ Keytronic 101 Enhanced Keyboard
- ✔ **Full Tower Case** w/ 250 Watt P.S.
- ✔ Microsoft Mouse Ergonomic 2 Button

$1,980

Best Buy 486DX4-100 AMD

- ✔ **HOT System 486DX4-100Mhz VLB**
- ✔ 256KB Cache MotherBoard
- ✔ **8 MB of RAM 70ns (72 Pin SIMM)**
- ✔ IDE VLB 2HD/2FD w/ 2S/1P/1G Port
- ✔ TEAC 1.44 MB Floppy Drive
- ✔ **IDE Quantum 540 MB Hard Disk**
- ✔ **Multimedia Kit CDROM + Sound + CDs**
- ✔ Cirrus Logic VLB w/ 1MB DRAM
- ✔ Keytronic 101 Enhanced Keyboard
- ✔ Middle Tower Case w/ 230 Watt P.S.
- ✔ Microsoft Mouse Ergonomic 2 Button

$1,320

Multimedia PC 486DX2-80

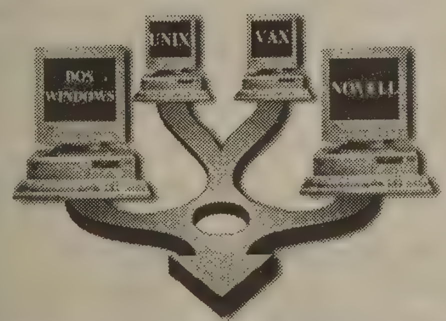
- ✔ **Dash Green PC 486DX2-80 AMD 5Volt**
- ✔ 256KB Cache MotherBoard
- ✔ **8 MB of RAM 70ns**
- ✔ IDE VLB 2HD/2FD w/ 2S/1P/1G Port
- ✔ TEAC 1.44 MB Floppy Drive
- ✔ **IDE Quantum 540 MB Hard Disk**
- ✔ Middle Tower case + 230 Watt P.S.
- ✔ **Cirrus Logic VLB w/ 1MB DRAM**
- ✔ **Multimedia Kit CDROM + Sound**
- ✔ Microsoft Compatible Mouse
- ✔ **Scocos 14" Non-interlace 1024x768**

4DX2-80 $1480

Basic Intel 486DX2-66 VLB

- ✔ **Dash Intel 486DX2-66Mhz VLB**
- ✔ 256KB Cache MotherBoard
- ✔ **4 MB of RAM 70ns**
- ✔ IDE VLB 2HD/2FD w/ 2S/1P/1G Port
- ✔ TEAC 1.44 MB Floppy Drive
- ✔ **Quantum 540 IDE Hard Disk**
- ✔ **Cirrus Logic VLB 1MB**
- ✔ 101 Enhanced Keyboard
- ✔ Mini Tower Case w/ 230 Watt P.S.
- ✔ **Scocos 14" Non-interlace 1024x768**
- ✔ Microsoft Compatible Mouse

4DX2-66 $1060



INTRODUCING
AFFORDABLE NETWORK SERVER

- ✔ Completed 486DX2-66 Intel Server
- ✔ 8 MB of RAM, 1.44 Teac FDrive
- ✔ Mono Monitor + Card
- ✔ 16 Bit Novell 10BaseT or Caxial
- ✔ 540 IDE Hard Disk w/ IDE Controller
- ✔ Novell Netware Version 3.12 5 users
- ✔ Free setup + Install Novell Software

$1,820

Store Hours: Mon - Fri: 9:00AM - 6:00PM • Sat: 10:00AM - 5:00PM

HARD DISKS

270 MB IDE Quantum 12ms	$180
290 MB SCSI Maxtor 14ms	$205
420 MB IDE Conner 14ms	$180
540 MB IDE Maxtor 12ms	$215
540 MB SCSI Maxtor	$240
540 MB IDE Quantum 12ms	$215
540 MB SCSI HD Quatum LPS-540S	$240
730 MB Quantum IDE Hard Disk	$295
1.2Gibyte Western Digital IDE	$395
1.08 Gibyte Conner CFA1080A 9.5ms	$420
1.0GB MB SCSI-2 HD Quatum (9ms)	$530
2.1GB MB SCSI-2 HD Quatum (9ms)	$920

CD ROM / SOUND CARDS

Sony CD 33A/ **Panasonic** CP-562	$130
Creative Labs Discovery CD 16 Kit	$250
Hamony Multimedia kit CDROM	$240
Mitsumi 4X EIDE CDROM	$195
TEAC 4X EIDE CDROM	$295
Sound Blaster 16 Basic / SB 16 MCD	$95/128

PCI / VLB / EISA MOTHERBOARDS

INTEL P5-90 PCI w/ 256 KC MB + CPU	$840
INTEL P5-100 PCI w/ 256 KC MB + CPU	$1060
ATP54 VLB+PCI P5-90 MB + CPU	$790
ATP54 VLB+PCI P5-66MB + CPU	$740
AIR EISA PCI P5-90MHZ MB + CPU	$1190
BAY 486DX2-66 VLB 256 Kc w/o CPU	$100
MICRONICS M54PI P5-90 w/IDE w/o CPU	$ 520

PRINTERS

Panasonic KX-1150/2023	$140/200
Epson 720DPI Inkjet Color	$590
HP Deskjet 540/560C	$290/565
HP Laserjet 4+/4M+/4L/4ML	$1395/1895/620/985

FLOPPY DRIVE/TAPE BACKUP

TEAC 1.2MB 5.25	$45
TEAC 1.44MB 3.5/ WFrame	$36/40
TEAC Dual Floppy Drive 1.2 & 1.44MB	$90
Summit Tape Backup 250MB	$155
Colorado Tape Backup 250MB	$155
Archive 250MB Tape Backup Floppy Co	$155

NETWORK CARD / SOFTWARES

3COM	
3C503-16 Etherlink II 16 bit coax/TP	$ CALL
3C509-16 Etherlink III 16 bit coax/TP	$ CALL
COMPULAN	
NE 600E 16 bit TP	$ CALL
NE 200E 16 bit Coax	$ CALL
HUB	
Hub 8 Port TP	$ CALL
Hub 16 Port TP	$ CALL
NOVELL SOFTWARE	
Netware 3.12 for 5/10/20 Users	$595/1290/1895
Netware 4.01 for 5/10/20 Users	$820/1820/2630

SCANNERS

ScanJet IICX Color w/ Kit	$920
ArtiScan Scanner 600/800/1200	$655/755/1025

SOFTWARES

VNCF (Vietnamese Classic Font) MAC/PC	$140
Microsoft DOS 6.22	$40
Microsoft Windows 3.1	$45
Windows for WorkGroup 3.11	$65

MONITORS

SuperVGA (1024x768,0.28) Hitachi Tube	$220
SuperVGA (1024X768, Non-int)Hitachi T.	$240
NEC 2V 14" Flat Screen	$330
NEC 3V 15" Flat Screen	$420
NEC XE 15" 1024x768 76HZ	$530
NEC XE 17" 1024x768 76HZ	$985
NEC XP17 17" Flat Screen	$1249
NEC 6FGp 21" Flat Screen	$1995
Viewsonic 6e 14" 0.28 DP	$275
Viewsonic 15 15" 0.28 1280x1024	$405
Viewsonic 17 17" 0.28DP	$850
Viewsonic 20 20" 0.28DP	$1480
Viewsonic 21 21" 0.26DP	$1680
Mag DX 15F 15" 0.28DP	$365
Mag DX 17F 17" 0.26DP SVGA Monitor	$660
SONY 1430 14" 1024x768 0.25DP	$555
SONY 15SF 15" Monitor	$420
SONY 17SF 17" 1280X1024 .25	$870
SONY 20SE 20" 1280x1024 0.30DP	$1835

VIDEO CARD -VLB- VIDEO CARDS

Mono Card w/ Printer Port	$13
Trident 512k Card/ Trident 1MB card	$45/60
16Bit 1 MB Tseng-4000 72Hz 32K Color	$75
Cirrus Logic VLB 1MB/2MB	$90/135
Spider Tarantula 64 VLB/PCI 2MB	$285/285
Spider Black Widow VLB/PCI 1MB/2MB	$170/239
Spider 32 VLB 1MB/2MB	$ 90/135
Spider 64 VLB/PCI 1MB/2MB	$195/295
Orchid Kevin EZ VLB w/!MB	$98
Orchid Kevin 64 PCI w/ 1MB/2MB	$135/185
Diamond Stealth 32 2MB VLB/PCI	$195/195
Diamond Stealth 64 2MB VLB/PCI	$339/339
Diamond Stealth 64 4MB VLB/PCI	$470/470
Diamond Stealth Pro VRAM 2MB	$310/320
Diamond Viper SE VRAM 2MB PCI	$300
#9GXe-64 Pro VRAM 2MB PCI/VLB	$349/349
ATI Ultra Pro VLB 2MB VRAM	$345
ATI Graphic Pro Turbo 2MB PCI/VLB	$379/379

FAX/ MODEM

Zoltrix 2400 Internal Mode	$30
Zoltrix 9600/2400 Fax/Modem	$45
Zoltrix 14.4K V.32 bis, V.42 bis I/E	$75135
US Robotics Sportster 14.4K I/E	$100/120
US Robotics Sportster 28.8 V34 I/E	$205/219
Intel SatisfaxtionModerm/400e I/E	$270
Megahertz PCMCIA XJ2144	$245

MISCELLANEOUS

IDE Multi/IO Caching Controler To 64MB	$105
Promise DC-2000 VLB IDE& I/O	$40
Dash VLB IDE & I/O Suport 2.88FDFast	$40
Conner CNR-4320 2 Gibyte tape Backup	$745
Conner CNR-4324 4 Gibyte tape Backup	$850
Promise DC-4030VL IDE VLB CACHE	$105
Logitech Mouse Man serial	$35
Adaptec 1542C/1542C Kit SCSI	$175/240
Adaptec 2940 PCI SCSI-2 w/ Kit	$180 /$245
Digitizer Summasketch 12x12, 4 Button	$270
Northgate 101/102 Keyboard	$69/69
Focus 2001/9000 Enhanced KB	$43/53
Megahertz PCMCIA XJ2144 FAX	$245
Xircom PCMCIA 10BaseT Card	$230
Power Supply 250 Watt For Tower case	$45
APC-600 Smart-UPS	$360
APC-400 Smart-UPS	$290
PowerChute Software for UPS	$75
Microsoft Mouse	$35

BAYCOMPUTER, INC.

MasterCard VISA

1252 So. Abel Street, • Milpitas, CA 95035
Tel: (408) 956-8014 • Fax: (408) 956-8013
EMAIL: BAYCOMNO1@AOL.COM

AMIGA *continued...*

ANOTHER ONE BITES THE DUST

On a sad note, *Amiga World* has apparently suspended publication. *AW* has been with the Amiga since its inception and will be missed. However, advertising makes the world go 'round—at least in magazine publishing circles—so this should bode well for *Amazing Computing*, now the only US general Amiga-specific computing (printed) magazine. Amiga advertisers will now have little choice if they want to hit their target market.

COMMODORE

The Commodore situation continues to be unresolved, with two new parties, Escom AG of Germany and an unidentified US concern, entering the bidding process. However, reports indicate that a bid from Escom has been officially accepted by the trustees. This supposedly triggers a final auction of the Commodore assets, which is to take place very soon. We shall see...

PRODUCTS KEEP COMING

Even in light of the Amiga's uncertain future, new products and upgrades seem to keep on coming, some of them quite major. In addition to Flyer and VLab Motion, there are upgraded versions of ImageFX, WordWorth, Pegger, Final Writer, PageStream, TypeSmith, WaveMaker, LightWave 3D, VideoToaster software, and DeluxePaint (due soon), as well as entirely new products like Alpha Paint, World Construction Set, and many LightWave 3D enhancement programs. There are many other titles, including a slew of games and CD-ROM collections. So it's not as if there is nothing new for Amigans to spend their money on.

HANG IN THERE

Call me an optimist, but I believe the Amiga still has a future. If nothing else, the eventual resolution of the Commodore situation should provide a source for spare parts for years to come. Furthermore, the upcoming release of DraCo seems to assure continuation of the Amiga at least in spirit.

I think a lot of users are becoming too concerned about "having to" move to another platform. If your Amiga meets your needs, stop worrying and sit tight. If you are a really serious gamer, how can you go wrong with a Sega Genesis or Super Nintendo? The PC platform (and Mac for that matter) is in a big transition right now in terms of bus standard, CPU, OS, etc. Now is not the best time to sink a big chunk of change into a PC and the necessary software. It is basically a crapshoot right now.

If you're using your Amiga for business, consider upgrading to an '040, if you haven't already. '060-based accelerators should be shipping by summer. This will put a lot of pep into your machine for a lot less money than changing platforms.

> The old saying "you get what you pay for" is applicable to PCs as much as anything else. Don't shop based on price alone and realize that a "quality" muscle machine is going to cost a premium.

MOVING TO THE PC WITH LIGHTWAVE 3D

If you're a LightWave 3D fan and considering a move to a PC versus upgrading your Amiga, there are some serious things to consider. Although LightWave 4.0 is expected to run under Windows 3.1, most professionals are using Windows NT.

Why NT? Well, a huge reason is long filenames. Remember Windows 3.1 still runs over DOS, so you are limited to the 8+3 filenames. This means you'd have to rename all of your object and image files, including image maps used for surfacing. It has also been reported that LightWave will run about twice as fast under NT on the same machine. Another NT benefit is that it is a pre-emptive multitasking OS, like AmigaDOS. (Note: Windows 95 is supposed to have long filenames and pre-emptive multitasking.)

Since NT is not a mainstream OS, you need to be more concerned about hardware compatibility for things like the controller card, video card, etc. Either NT must have the drivers already included, or the peripheral maker must provide them. Furthermore, I've been told, installing and running NT is no walk in the park.

MORE MUSCLE

Although a 486DX2-66 reportedly beats an '040/40, the upcoming '060 should be pushing Pentium speeds. Therefore, if you're going to get a PC, it doesn't make any sense to get anything less than a 90 or 100MHz Pentium. Unfortunately, I have observed a very high failure rate among Pentium PCs—and I'm not talking about the highly publicized Pentium bug. My guess is that some clone manufacturers are using components that are not up to the task of dealing with this high-speed processor.

The old saying "you get what you pay for" is applicable to PCs as much as anything else. Don't shop based on price alone, and realize that a "quality" muscle machine is going to cost a premium. A fully configured quality 100MHz Pentium system, with a 17-inch monitor, 32MB RAM, fast video board, SCSI-2 controller, 1GB drive, soundcard, 4X CD-ROM, etc., is probably in the $4000 to $5000 range. Much of the cost is for RAM, and you still might need to increase this to 64MB for a workable system. Additionally, the high-end video board is adding $500 to $1000 to the cost. A lot of these things are just not found on your average no-name PC clone. (DEC Alpha-based machines start at $10,000.)

DON'T FORGET THE SOFTWARE

Don't forget you'll also need to buy some software like a word processor, spreadsheet, image

THE INDUSTRIAL COMPUTER EXPERTS!

Industrial Computers Are Our Main Business!

Direct from manufacturer   *Made in Silicon Valley, U.S.A.*

The Best Quality, Cost Effectiveness & FREE Technical Support!
Dealer Inquiries Welcome!

19" Rack Mount Chassis

- 8 Drive Bays
- 8 to 20 Slots
- Security Lock
- Vibration Protection
- Dust Proof Cooling Fan
- Special/High P/S Available

Wall Mount Industrial Chassis

- Rugged Compact Package
- 6 AT slot Passive Backplane
- 100 Watt Power Supply
- Two 3.5" Drive Support
- Extra Cooling Fan
- Vibration Protect Design

19" Rack Mount Monitor Case

- Anti-Glare Screen
- Shielded Electronics
- 12", 14", 15", 17" Monitor fittings
- Optional Touchscreen available

19" Rack Mount Keyboard Case

- Heavy Duty Steel Construction
- IBM PC AT Fully Compatible
- Includes Keyboard, Rail & Mouse Holder

Full Featured CPU Card

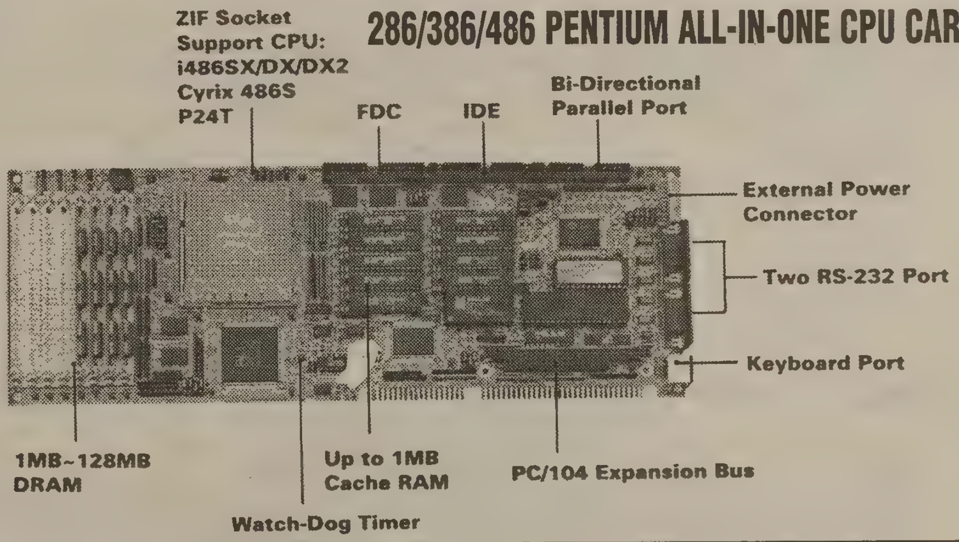
- 80286 to Pentium CPU
- 256KB Cache (80486)
- 72 Hours Burn-in Test
- ISA/EISA/VESA
- IDE Controller Built-in
- Watchdog Timer

Passive Backplane

- 4 Slot to 20 Slot Passive Backplanes
- ISA/EISA/VESA/PCI Types
- Segmentation Available

Your Complete Industrial Computer Solution Center!

286/386/486 PENTIUM ALL-IN-ONE CPU CARD


ZIF Socket
Support CPU:
i486SX/DX/DX2
Cyrix 486S
P24T
FDC
IDE
Bi-Directional
Parallel Port
External Power
Connector
Two RS-232 Port
Keyboard Port
1MB~128MB
DRAM
Up to 1MB
Cache RAM
PC/104 Expansion Bus
Watch-Dog Timer

• MULTIPROCESSING PC • RISC BASED PC • ALL SIZES OF MONITORS • MEMORY • CPU • STORAGE DEVICES • CONTROLLER • MULTIMEDIA

20 different types of Chassis • Luxury or Economy Edition • Custom Systems Available

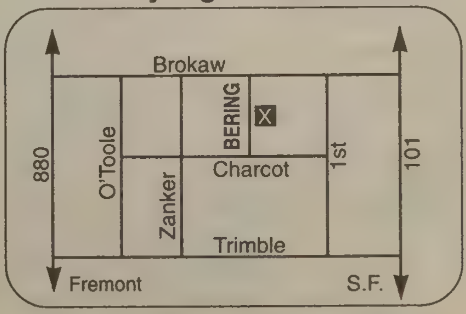
Government, Corporate, University & VAR Inquiries and PO's Are Welcome. Your Complete Industrial Computer Solutions. Industrial Solutions with Personal Service. Volume Discounts Available.

EIT
Electro-Integrated Technology, Inc.

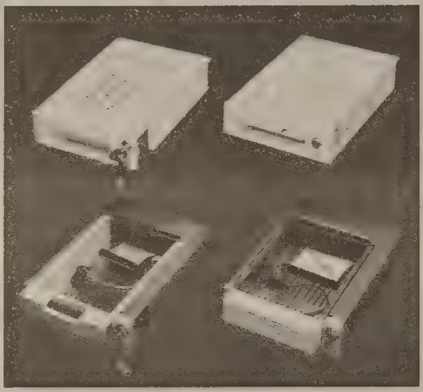
(408) 321-9030

FAX: (408) 321-9032
Hours: 8am - 6pm
Outside of Cal. 1-800-EIT-0852
2151 Bering Drive, San Jose, CA 95131

E-Mail: yong@netcom.com

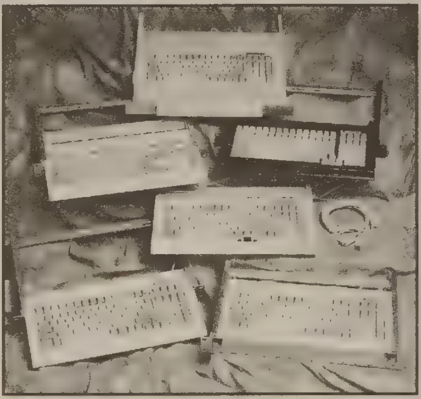

Brokaw
BERING
X
880
O'Toole
Zanker
Charcot
1st
101
Trimble
Fremont
S.F.

REMOVABLE STORAGE MODULES



FEATURES & OPTIONS:
- Supports most 3.5" hard drives
- IDE, or SCSI interfaces
- Hot removability
- Key lock ON/OFF security
- Fan cooling option
- Built-in SCSI ID selector switch option
- Ruggedized aluminum or low-cost plastic version
- Power/Drive activity LEDs
- Patent protected

RUGGED RACKMOUNT KEYBOARDS



- 19" rackmount keyboards
- 1U or 1.75" space
- 25 models
- Full travel and membrane types
- IBM PC XT/AT, PS2 compatible
- US and Intl. versions
- Spring-lock front panel
- Serial output 16mm, 2 button trackball

JNL Computer Products Inc.
659 Glass Ln.
Modesto, CA 95356
Tech Support: 209-575-4662
Fax: 209-575-4682

Call **JNL** at
1-800-283-5123

JNL
COMPUTER PRODUCTS INC.

486 DX2-66 VLB
- 486 DX2-66 w/256K MB
- 486 DX2-66 CPU
- 4 MB RAM
- 420 MB IDE Hard Drive
- 1.44 MB Floppy Drive
- VESA CTL w/I/O
- VESA VGA w/1 MB
- Mini Tower Case w/230W PS
- 101 Mitsumi Keyboard
- 14" .28 SVGA Monitor

intel inside

$869

486DX4-100 $948

Pentium 66 PCI
- Pentium 66 PCI w/256K MB
- Pentium 66 CPU
- 4 MB RAM
- 420 MB IDE Hard Drive
- 1.44 MB Floppy Drive
- PCI CTL w/ I/O
- PCI VGA w/1 MB
- 101 Mitsumi Keyboard
- 14" .28 SVGA Monitor
- Mini Tower Case w/PS

intel inside

100MHz $1469

$1169

90MHz $1399

REPAIR & UPGRADE YOUR SYSTEM FLAT FEE $19 ON LABOR

MULTIMEDIA UPGRADES
- Sony 2X 55E CD-ROM
- 16 Bit Media Magic Card
- Pair of Speakers
- Microphone

$169

CASE w/ PS

Mini Tower Case w/PS	$32
Middle Tower Case w/PS	49
Full Tower Case w/PS	69

MOTHERBOARDS

IBM 486SLC2-66-64K w/CPU	$129
486DX-33/50/66 w/256K VLB	83
Pentium 60/66 4 PCI	119
Pentium 90 4 PCI	149

MEMORY

4 MB-72 Pin	$135
8 MB-72 Pin	265
16 MB-72 Pin	420

DRIVES

1.2 MB FDD	$39
1.44 MB FDD	31
420 MB IDE HDD	165
540 MB IDE HDD	175
850 MB IDE HDD	249

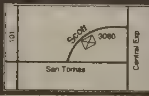
MISCELLANEOUS

VESA CTL w/I/O	$15
VESA VGA w/1 MB	61
PCI VGA w/1 MB	79
SONY 2X 55E CD-ROM	109
Mitsumi Quad Speed Modem	189
16 Bit Media Magic	59
14.4 Fax Modem	46
28.8 Fax Modem US Robotics	189
14" .28 SVGA Monitor	183
14" .28 SVGA Monitor NI Low Rad	195
15" .28 SVGA NI Monitor	299

BG COMPUTER

3060 Scott Blvd., Santa Clara, Ca 95054
TEL: (408) 988-2968 • Fax: (408) 988-2686
1 Year Limited Warranty On Parts & Labor. Price Subject To Change w/o Notice
Intel Inside logo is a registered trademark of Intel Corporation

HOURS:
MON-FRI: 9am-6pm
SATURDAY: 10am-6pm



processor, etc., since none of your Amiga apps will work. You'll also need Windows NT as well as LightWave. These basic applications will probably add at least another $2000 to the price tag. So we're talking $6000 plus, just for a basic working system!

As you can see, the real cost of moving to the PC is significant. You really need to do your homework before jumping into the PC world and be ready to shell out some serious bucks. Make sure you buy from a reputable source who will stand behind their product, including taking it back if you are not satisfied. Also, have the vendor preinstall NT.

> I think a lot of users are becoming too concerned about "having to" move to another platform. If your Amiga meets your needs, stop worrying and sit tight.

SCRATCH THAT ITCH

If you really have the PC itch bad, but still love your Amiga, scratch it the way I did. I bought a name brand 486SX-33 monochrome laptop, with 4MB of RAM and a 200MB hard disk. The monochrome display does sixty-four-shades of gray, so it's more than adequate for most PC productivity applications. It also has a VESA local bus SVGA output, which I can connect to my Commodore 1960 monitor if I really need color. I also share the laser printer and modem connected to my desktop Amigas using switch boxes.

Sticking with a name brand was very important to me because of the fact that it was a laptop. Compared to the modular plug-in world of the desktop clone PCs, laptops are extremely proprietary in construction. I wanted to know that the company would be there years from now, if any problems should arise and I needed repairs.

Also, the monochrome display really kept the price down and saved me enough extra cash to upgrade the memory to 20MB. However, the lack of a built-in math coprocessor in the 486SX, and no provision to add one, was a big pill to swallow. Unfortunately a 486DX (which has math coprocessor) only came with the color models and thus upped the price considerably. I would have loved to have found a 66MHz or faster DX with a monochrome display, but none of the companies I considered acceptable was breeding such an animal.

Anyway, a number-crunching rendering monster it is not, but it

continued on page 298

PARAMOUNT COMPUTER of EAST BAY

MONITORS

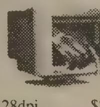
KFC

CT1428C 14" Green, 1024x768 N/I 28d	$215
CT1511 15" 1280x1024 Flat Screen, .28d	$290
CT1507 15" 1280x1024 Green, Digital Ct.	$340
CT1712 17" 1280x1024 Flat Screen, .28d	$585
CT1718 17" 1280x1024 Green, Digital Ct.	$660

MAG

DX15F 15" 1280x1024, FlatScreen	$345
DX17F 17" 1280x1024, FlatScreen	$615

NANAO

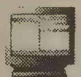


F2.17 17" 1280x1024 66Hz, 28dpi	$825
F2.17EX 17" 1600x1280 66Hz, 26dpi	$930
T2.17TS 17" 1600x1280 66Hz, .25dpi	$970
T2.17 17" 80Hz, 1280x1024, .25dpi	$1270
T2.20i 20" Trinitron tube, 1280x1024,	$1875
F760IW 21" 1280x1024 @ 74Hz .31dpi	$1865

NEC

3V 15" 1024x768 SVGA	$call
XV15 15" 1024x768 Multisync U.S Made.	$445
XE15 15" 1024x768 XGA-2	$529
XE17 17" 1024x768 @ 76Hz	$955
XP 17 17" w/ OptiClear Surface	$1195
XE 21 21" 1280x1024 @ 76Hz	$1935
XP 21 21" w/ OptiClear Surface	$2455

SONY



CPD 15SF 15" SVGA, .25dpi.	$440
CPD-17SF 17" SVGA, .25dpi	$835
GDM-20SE1 20" State of the Art	$1765

ViewSonic

ViewSonic 6E 14" SVGA 72Hz .28dpi	$255
ViewSonic 15G 15" 1024x768 Flat Screen.	$375
ViewSonic 15 15" 1280x1024 .28dpi	$400
ViewSonic 17G 17" 1280x1024 Flt-Scr	$695
ViewSonic 17 17" 1280x1024@ 76Hz	$810
ViewSonic 20 20" 1600x1280, non-int	$1410
ViewSonic 20G 20" 1600x1280, non-int	$1255
ViewSonic 21PS 21" 1600x1280, non-int.	$1615

AcerView

AcerView 34T 14" 1024x768 N-I .28dpi	$225
AcerView 56L 15" 1280x1024 Flt-Scr	$345
AcerView 76I 17" 1280x1024 .27dpi	$615

Please Call for Prices On Unlisted Monitors

VIDEO CARDS

ATI

VGA1024 w/ Mouse 512K/1MB	$65/85
Graphics Wonder 1MB DRAM	$139
Graphics Expresion 1MB DRAM	$175
Graphics Pro PCI 2MB VRAM	$295
Graphics Ultra Pro EISA 2MB	$325
Graphics Pro TurboOEM PCI/VLB 2MB	$279
Graphics Pro TurboOEM PCI/VLB 4MB	$455

DIAMOND

Speed Star 32 Alpine Series PCI 1MB	$89
Stealth 64 VIDEO 2MB DRAM PCI/VLB.	$198
Stealth 64 VIDEO 2MB VRAM PCI/VLB.	$278

Genoa

8500 VL Turbo 1MB VLB	$95
Phantom 64i 1MB/2MB VLB	$139/179
Phantom 64i 1MB/2MB PCI	$139/179

VIDEO CARDS

Hercules

Dynamite Power 1MB/2MB	$159/195
D302 Dynamite Pro 2MB ISA	$209
D602 Dynamite Pro 2MB DRAM VLB	$219
D702 Dynamite Power Pro 2MB VLB	$229
D902 Dynamite Power Pro 2MB PCI	$229
NEW!! Hercules Stingray 1MB VLB	$119

MATROX

IMP Plus PCI 1600x1280 2MB	$380
IMP Plus 220 PCI 2MB	$465
VLB/2 Plus VLB 1600x1280 2MB OEM.	$call

Number Nine

9GXe 64 VLB/PCI 1MB DRAM	$179
9GXe 64 Pro PCI/VLB 2MB VRAM	$339
9GXe 64 Pro PCI/VLB 4MB VRAM	$499

ORCHID

Kelvin 64 PCI or VLB 1MB/2MB	$125/165
Kelvin EZ PCI or VLB 1MB	$109

SPiDER Graphics, Inc.

Spider 256 CACHE 1MB/2MB	$118/155
Spider 64 VLB/PCI 2MB/4MB	$149/259
Tarantula 64 2MBVRAM OEM	$225

MEDIA VISION

Pro Graphics 1024 256 Color VLB	$215
Pro Graphics 1024 16.7Meg Color	$239
Pro Graphics 1280 VLB 4MB VRAM	$335

HARD DRIVES

Maxtor

7420AV 420MB IDE 12ms	$175
7540A 546MB IDE 12ms 256K	$195
7850A 850MB Enhanced IDE 12ms	$275
71260A 1.2GB Enhanced IDE >12ms	$375

CONNER

CFS420A 420MB IDE >12ms	$175
CFA540A 540MB IDE >12ms	$195
CFA850A 850 MB IDE >12ms	$275
CFA1275A 1.2GB IDE 12ms	$385

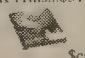
Quantum

QM30540LTA 540MB IDE 12ms	$195
QM30730LTA 730MB IDE 11ms	$225
QM30540MVS 540MB SCSI-II 14ms	$215
QM30730LTS 730MB SCSI-II 11ms	$265
QM2100S 2.1GB SCSI-II 8.9ms	$call

Seagate

ST31200N 1.0GB SCSI-II 9ms 256K	$call
ST31230A 1GB SCSI-II 9ms 256K	$565
ST32430N 2.1GB SCSI-II 10ms	$945
ST32550N 2.1GB SCSI-II 8ms	$1065
ST15150N 4.2GB SCSI-II 8ms	$1645
ST15150W 4.2GB SCSI-II Fast Wide	$1815
ST410800N 9GB SCSI-II 1024K 11ms	$3145

WESTERN DIGITAL



WDAC2420 420MB IDE 13ms	$call
WDAC2540 540MB IDE 12ms	$210
WDAC2700 730MB IDE 10ms	$call
WDAC2850 850MB IDE <10ms	$255
WDAC31000 1GB IDE 10ms	$380

MICROPOLIS

MC4110A 1.0Giga Byte 8.5ms	$call
MC2217A 1.75Giba Byte 10ms	$call

POINTING DEVICES

Microsoft Mouse II OEM Serial	$32
Microsoft Mouse II OEM Bus	$49
Logitech MouseMan 3 Buttons Serial/PS2.	$35
QTRONIX Track Ball 3 Buttons Serial	$32
ETEQ 3Buttons Microsoft Compatible	$10

PRINTERS

HP4L 300dpi Laser Printer REt	$call
HP4P 600dpi Laser Printer REt	$call
HP4V 600dpi Laser Printer REt	$call
HPMPlus 600dpi Laser Printer REt	$call

CONTROLLERS

ADAPTEC 2940 PCI Fast SCSI-II OEM	$205
ADAPTEC 2842A VLB Fast SCSI-II	$205
ATI PCI 4 IDE Cache Up To 16MB	$139
ATI VLB 4 IDE Cache Up To 16MB	$97
ATI PCI IDE 4 IDE LBA Enhanced	$29
ATI VLB IDE/16550IO 4HD,4FD 20M/S	$49
ATI VLB IDE/IO LBA 16MB/Sec	$32
PROMISE DC4030VL CacheVLB Ctrl	$105
WINBOND 16Bit IDE Ctrl w/ IOs	$15
WINBOND VLB Enhan. IDE Ctrl w/ IOs	$27

FLOPPY DRIVES

TEAC 1.44MB 3.5" Floppy Drive	$38
TEAC 1.2MB 5.25" Floppy Drive	$43
TEAC 1.2/1.44 Combo Floppy Drive	$95
TEAC 2.88MB Floppy Drive	$call

CD-ROM DRIVES

Panasonic Dual Speed CD-ROM AT	$125
Mitsumi 4x Speed CD-ROM EIDE BUS.	$180
Toshiba XM3601B SCSI-II 4X Speed	$295
Toshiba 4X Speed EIDE interface	$195
Teac SuperQuad 4X Speed AT interface	$185
Plextor Quad-Speed SCSI-II 1mb Buffer	$458
Pioneer Disc-Jockey CD-ROM	$call

TAPE BACKUP DRIVES

Conner 250 Int. w/ 1 Tape Cartridge	$145
Conner 420 Int. w/ 1 Tape Cartridge	$190
Conner 250 External (via parallel port)	$309
Colorado DJ20 JUMBO250 250MB	$159
Colorado DJ30 JUMBO350 350MB	$190
Colorado 2.GB Ext. SCSI Tape Back-up.	$1149
Trakker 120 (parallel external backup)	$273
Trakker 250 (parallel external backup)	$313

FAX/MODEM

Intel 14.4 Internal Fax/Modem	$119
Intel 14.4 External Fax/Modem	$145
Intel 28.8 Internal Fax/Modem	$call
US Robotics 28.8 int. V34 Fax/Modem	$224
US Robotics 28.8 int. Fax/Modem	$189
US Robotics Sportster 14.4 Internal	$105
US Robotic Sportster 14.4 Ext	$125
Supra Fax Modem 14.4i Internal	$75
Supra Fax Modem 14.4i External	$145
Supra Fax Modem 28.8i Internal	$189
Zoltrix Internal 14.4 Fax/Modem	$59
Zoltrix Inter. Voice 14.4 Fax/Modem	$69
Monterey Internal 14.4 Fax/Modem	$59

CASES w/ POWER SUPPLY

AT Desktop case w/ 230 Watts P. S.	$51
Mini Tower case w/ 230 Watts P. S	$48
Medium Tower case w/ 230 Watts P. S	$72
Full Tower case w/ 230Watts P. S.	$89
Super Full Tower Case w/ 2 side doors, dual fan w/ 300Watts Power Supply	$160

KEYBOARDS

Mitsumi 101 Enhanced	$22
Keytronic 101 Enhanced	$34
Focus 2001 101 Enhanced Click	$41
MicroSoft Natural KeyBoard	$92
Maxiswitch 101 Enhanced	$34

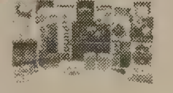
SOUND CARDS

CREATIVE
CREATIVE LABS INC.

Sound Blaster 32 AWE/ w/ASP	$229/259
Sound Blaster 16 MCD Reg./OEM	$119/89
Sound Blaster 16 SCSI Reg./OEM	$165/125

TURTLE BEACH SYSTEMS

Audio Advantage PCMCIA Wave Sound	$125
Tropez Sound Card w/ IDE CD-ROM Interf	$214
Tahiti Digital Audio Recording Card	$238
Monte Carlo 16Bit Sound Card	$88
Monterey Multimedia Sound Card	$317
MAUI Wavetable Synthesizer Upgrd	$137
Crescendo Music Kit w/ Keyboard	$222
Rio Synthersizer Wave Board Upgrade	$129



EDUTAINMENT CD 16
Sound Blaster 16, Amplified Speakers, Dual speed CD-ROM Drive, CD-ROM Software Bundle: Sherlock Holmes Consulting Detective, Indy 500, Software Toolwprks Multimedia Encyclopedia, Lemmings, The Secrets of Monkey Island, Loom, Secret Weapons of the Luftwaffe, Aldus Photostyler SE, More....$385

DISCOVERY CD 16
Same Hardware as EDUTAINMENT CD 16 Plus Dynamic Microphone CD Software:Grolier Multimedia Encyclopedia, Aldus Photostyler SE, HSC Digital Morph, Kai's Power Tools, Aldus Gallery effects, Altamira Composer, Children Screen Singer, Lemmings, Indy 500, More....$280

GAME BLASTER CD 16
Same Hardware as EDUTAINMENT CD 16 Plus Flight Joystick, Microphone, CD Software: Rebel Assault, Return to Zork, Iron Helix, Sim City: 2000, Indy500, Lemmings, Grolier Multimedia Ency. Civilization, Silent Service, F117A, Railroad Tycoon,More....$345

DIGITAL SCHOOLHOUSE
Sound Blaster 16, Amplified Speakers 2X CD-ROM with 20 Education Titles, More....$265

MULTIMEDIA OFFICE
Sound Blaster 16 ASP, 2X CD-ROM, Amplified Speakers, Microsoft Office Software....$415

MOTHERBOARDS w/ CPU

intel. Advanced Micro Devices

ASUS Pentium P5-100 PCI 256K	$955
ASUS Pentium P5-90 PCI 256K	$795
ASUS Pentium P5-75 PCI 256K	$565
ASUS 486DX4-100 PCI w/ iNTEL CPU.	$395
ASUS 486DX2-66 PCI w/ iNTEL CPU.	$280
(all ASUS comes w/ EIDE ctrl. & H.S. IO's)	
486DX4-100 VLB iNTEL CPU 256KC	$345
486DX2-66 VLB iNTEL CPU 256KC	$230
486DX2-50 VLB iNTEL 256KC	$220
486DX-33 VLB iNTEL 256KC	$195
486SX-33 VLB iNTEL 256KC	$165
ASUS 486DX4-100 PCI w/ AMD CPU	$340
ASUS 486DX2-80 PCI w/ AMD CPU	$295
(all ASUS comes w/ EIDE ctrl. & H.S, IO's)	
486DX4-100 VLB AMD 256KC	$290
486DX2-80 VLB AMD 256KC	$255
486DX2-50 VLB 256KC AMD	$215
486DX-40 VLB AMD 256KC	$205
486DX2-80 VLB CYRIX 256KC	$225
486DX2-66 VLB CYRIX 256KC	$210
486DX2-50 VLB CYRIX 256KC	$200
486DX-40 VLB CYRIX 256KC	$195

Please Call for Products Not Listed.

MONTHLY SPECIALS!!

VIDEO MEMORY

256 x4-80 (8 pieces @ $4.25 ea)	$34per MB
256 x8-80 (4 pieces @ $12.00 ea)	$48 per MB
[illegible]	[illegible] per MB

72 PINS MEMORY

512x36-80/70 2MB	$65/75
512x32-80/70 2MB	$60/70
1 x 36-80/70 4MB	$155/170
1 x 32-80/70 4MB	$145/155
2 x36-80/70 8MB	$305/335
2 x32-80/70 8MB	$295/310
4 x36-80/70 16MB	$535/565
4 x32-80/70 16MB	$505/535
8 x36-70 32MB	$call

30 PINS MEMORY

256x9-80/70 3 chips 256K	$8/9
1x9-80/70/60 3 chips 1MB	$36/38/42
1x9-80/70/60 9 chips 1MB	$37/42/48
4 x9-80/70 4MB	$135/148
[illegible] 16MB	$call

PENTIUM BAREBONE SPECIAL
- Pentium 75 M/B w/ INTEL CPU w/ 256K [illegible]
- PCI EIDE Controller 4-Hdd, 4Fdd w/
- Hi-Speed 16550 Uart I.O.'s, PRI. Port
- Medium Case w/ Power Supply

$415

486DX2-66 BAREBONE SPECIAL
- 486DX2-66 Mother Board w/ INTEL CPU
- MB w/ 256K Cache, Pentium P24 Ready
- Mini Case w/ 230Watts Power Supply

$335

SYSTEMS

PRO PENTIUM 100 SYSTEM

- INTEL P5-100 Processor.
- ASUS w/ INTEL Trident Chipsets
- PCI M.B. w/ 256K Ext. Cache
- 8MB RAM 70ns.
- 540MB IDE Hard Drive.
- Teac 1.2Mb & 1.44Mb Floppy Drives.
- PCI 32BIT IDE w/ 2 16550 UART I.O.'s 1Par.
- PCI Diamond Stealth 64 Video 2MB VRAM (64Bit Graph. 16.7Meg Colors.)
- 15" ACERVIEW Digital SVGA Monitor
- Medium Tower Case with UL P. S., Dual-Fan
- Microsoft Mouse
- Keytronic 101 Enhanced Keyboard

$2285

AUTOCAD PENTIUM SYSTEM

- INTEL P5-90 Processor.
- PCI M.B. w/ 256K Ext. Cache Memory. (upgradeable to P5-100MHZ)
- 16MB RAM 70ns.
- 1.2GB Western Digital EIDE Hard Drive.
- Teac 1.2Mb & 1.44Mb Floppy Drives.
- PCI 32BIT EIDE w/ 2 16550 UART I.O.'s 1Par.
- PCI Diamond Stealth 64 Video Card 2MB VRAM (64Bit Graph. 16.7Meg Colors.)
- ACERVIEW 17" Flat Screen Monitor .27dpi
- Medium Tower Case with UL P.S., Dual-Fan
- Microsoft Mouse
- Keytronic 101 Enhanced Keyboard

$2795

PENTIUM P-75 FILE SERVER

- INTEL P5-75 Processor.
- PCI MB w/ 256K Ext. Cache Memory. (upgradeable to P5-100MHZ)
- 8MB RAM 70ns
- 540MB IDE Hard Drive.
- Teac 1.44 Floppy Drive.
- Diamond Speedstar Alpine Series Video.
- 15" KFC Flatscreen 1280x1024 SVGA Mon.
- NE2000 Combo Network Card Supports RJ45, BNC, AUI NOVELL AUTHORIZED
- Medium Tower Case with 250 Watts P.S.
- M.S. Compatible 3 Buttons Mouse.
- 101 Enhanced Keyboard.

$1345

PRO 486 SYSTEM

- 486 VLB Motherboard w/256K Ext. Cache.
- Pentium Overdrive Socket
- 486DX-100 Ready
- ZIFF Socket w/ 30Pins & 72Pins Mem Socket.
- 4MB RAM (expandable to 96MB).
- 420MB IDE Hard Drive.
- 1.2MB & 1.44MB Floppy Drives.
- VL Bus IDE Card w/ I.O. (2ser., 1Par.1Game).
- Vesa Local Bus Video Card w/ 1MB Ram.
- Acer View 14" SVGA Monitor .28dpi N-I
- Mini Tower Case with 230 Watts P.S.
- M.S. Compatible 3 Buttons Mouse.
- 101 Enhanced Keyboard

Intel 486DX2-66	AMD486DX4-100
$1015	**$1045**
Cyrix 486DX2-80	AMD486DX2-80
$970	**$995**

MULTIMEDIA SYSTEM

- 486DX2-66 VLB M/B CPU w/ 256K L2 Mem
- 4MB RAM (expandable to 96MB).
- 420MB IDE Hard Drive.
- Sound Blaster MCD16
- Panasonic Dual-Speed CD-ROM Drive
- 10 CDs Bundle. Tropical Rainforest, Ultra Media, Digital Cinema, The Star Child, Top-25 Games, Animal Kingdom, Swimsuits, Newkids Edutainment, Discoveries of the Deep, & Ultimate Domain.
- Amplified Stereo Speakers
- 1.44MB Floppy Drives.
- 32Bit VLB IDE Card w/ I.O. (2Ser., 1Par., Gm).
- VLB SVGA Card w/ 1MB RAM.
- 14" SVGA Monitor .28dpi Non-Interlaced.
- Mini Tower Case with 230 Watts P.S.
- M. S. Compatible 3 Buttons Mouse.
- 101 Enhanced Keyboard.

$1125

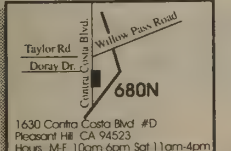
UPGRADE SPECIAL

- 486DX2-66 VLB MB w/256K L2 Mem.
- Mini Tower Case w/ 230 Watts Power Supply.
- 1MB Ram (expandable to 32MB).

$285

PLEASE CALL FOR ADDITONAL PRODUCTS INFORMATION

(510) 680-0204 fax (510) 680-1013



1630 Contra Costa Blvd #D
Pleasant Hill CA 94523
Hours M-F 10am-6pm Sat 11am-4pm
Pleasant Hill / Concord

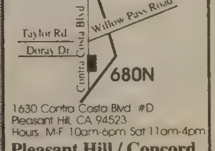
Great Service + Outstanding Prices = Call (510) 680-0204

VISA MasterCard AMERICAN EXPRESS
intel inside
Cyrix AMD 486
MICROSOFT. WINDOWS. COMPATIBLE

Terms and Conditions

1. One year parts & 3 years labor on all complete system.
2. Not responsible for typos.
3. Price and availability subject to change w/o notice.
4. Price reflects cash discount.
5. Sale prices are for end users purchase only.
6. All special-ordered items are non-refundable.
7. Shipping, Insurance and COD charges are extra and non-refundable

(510) 680-0204 fax (510) 680-1013



1630 Contra Costa Blvd #D
Pleasant Hill, CA 94523
Hours M-F 10am-6pm Sat 11am-4pm
Pleasant Hill / Concord

USM

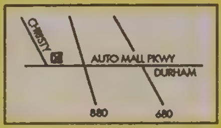
US MACH

US MACH Systems
USM Distributors
In business since 1983

VISA MasterCard

Price and availability subject to change.
No surcharge for credit cards.
Not responsible for typographical errors.

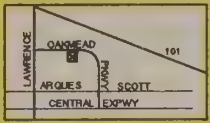
FOR THE BEST VALUE & SERVICE AT THE MOST COMPETITIVE PRICE!



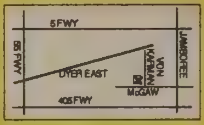
USM FREMONT
43104 Christy Street Fremont, CA 94538
EMAIL: USMACH@AOL.COM
510-623-9040 FAX: 510-623-7592
HOURS: M-F 9-6 • Sat 10-5

AIRPORT BLVD.
380
SAN MATEO AVE.
GRAND AVE.
101
So. AIRPORT

USM SAN FRANCISCO
61A Airport Blvd., So. San Francisco, CA 94080
415-952-5885 FAX: 415-952-5855
HOURS: M-F 9-6 • Sat 10-5



USM SUNNYVALE
1290 Oakmead Parkway, Sunnyvale, CA 94086
408-738-8291 FAX: 408-738-8299
HOURS: Mon-Fri 9-6



USM IRVINE
17145 Von Karman Ave, Ste. 109, Irvine, CA 92714
714-252-8335 FAX: 714-252-8354
HOURS: M-F 9-6 • Sat 10-5

American Megatrends

Factory Authorized Distributor

STATE OF THE ART TECHNOLOGY

The World Leader in AMI BIOS & Hardware Design

SUPERVOYAGER II/III 486
ENTERPRISE IV 486

- Intel DX2-66 CPU
- 256k Static RAM Cache
- 0MB RAM exp. to 64MB
- Built-in High Speed IDE/IO
  2 16550 UART Serial Ports
  & 1 Parallel Port
- Enhanced 101 Keyboard
- USM Mini Tower Case w/PS
- 1 year parts & labor warranty

$595
SuperVoyager 66

$695
Enterprise IV - 66

EXCALIBUR PENTIUM 60
ATLAS PCI PENTIUM 90
TITAN DUAL PENTIUM

- Intel Pentium CPU
- 256k Static RAM Cache
- 0MB RAM exp. to 128MB
- Built-in High Speed IDE/IO
  2 16550 UART Serial Ports
  & 1 Parallel Port
- Enhanced 101 Keyboard
- USM Mid Tower Case w/PS
- 1 year parts & labor warranty

$CALL

US design technologies

mach Series 2 Years MB & Lifetime Labor Warranty

mach V ENERGY STAR
mach VI DX2/DX4

- 256k Static RAM Cache
- 0MB RAM exp. to 64MB
- Enhanced 101 Keyboard
- USM Mini Tower Case w/PS
- 2 year parts & 1 year labor warranty

$495
mach V 486 - 66

$495
mach VI 486 - 80

$645
mach VI - 100

mach X PENTIUM PCI

- Intel Pentium CPU
- 256k Static RAM Cache
- 0MB RAM exp. to 64MB
- 2 Serial & 1 Parallel Ports
- Enhanced 101 Keyboard
- USM Mini Tower Case w/PS
- 2 year parts & 1 year labor warranty

$795
mach X - 75MHz

$975
mach X - 90MHz

$1095
mach X - 100MHz

MYLEX

MYLEX Motherboards Special Pricing Please Call

MYLEX 486DX2-66 VL
MYLEX 486DX2-66 PCI

- Intel DX2-66 CPU
- 256k Static RAM Cache
- 0MB RAM exp. to 64MB/128MB
- ZIF Socket
- Green PC Energy Star
- Enhanced 101 Keyboard
- USM Mini Tower Case w/PS
- 1 year parts & labor warranty

$445
MYLEX VL - 66

$545
MYLEX PCI/VL - 66

MYLEX PENTIUM PCI - 90MHz

- Intel Pentium CPU
- 256k Static RAM Cache
- 0MB RAM exp. to 128MB
- 3 PCI/5 ISA Slots
- Enhanced 101 Keyboard
- USM Mini Tower Case w/PS
- 1 year parts & labor warranty

$975

USM
US MACH

SYSTEMS SUPER SALE!!

M6 EagleSystem

BASIC CONFIGURATION:

- US design M6 486DX2/DX4 EagleBoard
- Supports 486 66MHz, 80MHz, 100MHz & Pentium P24T
- Vesa Local Bus - 3 VLB/5 16bit Slots
- 256K Level 2 - Write Back Cache Upgradeable to 512K
- ZIF Microprocessor Socket
- 3.3 Volt/5 Volt Autotransformer Circuitry
- Supports Intel, AMD, Cyrix CPU's
- Two Year Motherboard Warranty
- Deluxe Minitower Case w/250W PS
- Enhanced 101 Keyboard

$199

M10 EagleSystem

BASIC CONFIGURATION:

- US design M10 Pentium EagleBoard w/2 Year Warranty
- Supports Intel Pentium 75MHz, 90MHz, 100MHz
- PCI Bus Architecture - 4 PCI/4 ISA Slots
- 256K Level 2 - Write Back Cache
- ZIF Microprocessor Socket
- Green PC - Energy Star Compliant
- Two High Speed Serial Ports w/16550 UART
- Enhanced Parallel Port (ECP+EPP)
- Enhanced PCI IDE, Supports MODE 3 IDE
- Specially Tuned BIOS for M10 EagleBoard
- Deluxe Minitower Case w/250W PS
- Enhanced 101 Keyboard

$399

NEW

EagleView VL-Cache w/ Fast Video Caching Technology

- Super fast Video Cache up to 256K
- 32 bit VESA
- Refresh Rate 75Hz
- Colors 32K/64K/16.7M
- 0MB up to 2MB of Display Memory

$55

NEW

M12 Triton Pentium Systems!

M 12 EagleSystems

BASIC CONFIGURATION:

- US design M12 Pentium Eagleboard w/2 Year Warranty
- Supports Intel Pentium 75MHz, 90MHz, 100MHz, 120MHz
- PCI Bus Architecture - 4 PCI/4 ISA Slots
- 256K Level 2 - Write Back Cache
- ZIF Microprocessor Socket
- Green PC - Energy Star Compliant
- Two High Speed Serial Ports w/16550 UART
- Enhanced Parallel Port (ECP+EPP)
- Bus Master PCI IDE, Supports MODE 4 IDE
- Specially Tuned BIOS for M12 EagleBoard
- Deluxe Minitower Case w/250W PS
- Enhanced 101 Keyboard

$499

USM
US MACH

SYSTEM QUOTE BY FAX

Best Value & Service at the Most Competitive Price

Name: ____________________
Company: ____________________
Tel. No.: ____________________
Fax No.: ____________________

Fax to:

USM Fremont	**510/623-7592**
USM Sunnyvale	**408/738-8299**
USM San Francisco	**415/952-5855**

EMAIL: USMACH @AOL.COM

SYSTEM CONFIGURATION:

Motherboard/CPU: **486-66 -80 -100** **Pentium -66 -90 -100**

RAM Memory ____________________
Graphics Card ____________________
Monitor ____________________
Hard Disk ____________________
Controller/ I/O Ports ____________________
Floppy Drive: ____________________
Keyboard ____________________
Case and Power Supply: ____________________
Others: ____________________

GE Extended On-site Warranty up to Four Years - Now Available Thru USM

AMIGA

continued from page 294

should have enough horsepower to allow me to build LightWave objects while enjoying some rays pool-side, once PC LightWave ships!

SCSI PERIPHERALS

Initially I tried one of those parallel port SCSI adapters. This worked adequately with my Syquest and CD-ROM, but my DAT drive gave it fits. In fact, the only thing that would talk to my DAT was the clunky backup program that came with the device, and it never worked right. No other commercial backup program supported it. Well, I ended up returning it and getting the Adaptec PCMCIA SCSI card.

The Adaptec works fantastically with all of my external Amiga SCSI devices (Syquest, CD-ROM, and DAT). I can simply disconnect them from my Amiga and plug them into my laptop.

Since my laptop has two PCMCIA II slots, a feature I highly recommend, I plan on filling the second one with a PCMCIA sound card. About the only thing I can't do is add expansion cards. However, if this is a requirement for you, there are some laptops available with docking stations that provide this ability. Of course, this adds another level of cost to your purchase.

EMULATION

Alternatively, you can also get a PC or Mac emulator for your Amiga. However, as wonderful as these things are, they have limits. The ability to add expansion hardware may be limited or impossible. Also, there always seems to be some quirk that limits compatibility with certain applications. This usually results in a lot of trial and error before you get everything working smoothly.

Still, emulators can be a workable solution for many users, even in professional situations. It really depends on your needs and requirements. But fully configured consumer-level PC and Mac systems have become so very cheap, it makes the emulators less attractive. Plus, you generally get huge hard drives and high-resolution monitors, etc., all thrown in for the purchase price. If you lack the desktop real estate for two computers, consider a laptop.

For now, my laptop satisfies my PC itch and also gives me the freedom of portability, something that you can't really have with the Amiga. I can also go into the local computer store and not feel bad that I can't run any of the PC software.

If I have to make a move, I'm considering a DEC Alpha-based system for the sheer speed, but DraCo might just change my mind. However, for now my workhorses remain my A3000 and A4000, both accelerated with '040/40 WarpEngines. (Note: my new email address is *djn@ix.netcom.com* . Feel free to drop me a line!) ■

Copyright © 1995 by Douglas J. Nakakihara. All rights reserved.

RESOURCES:

Adaptec	1-800-442-7274
Amazing Computing	1-800-345-3360
NewTek	1-800-847-6111
NoahJi's	(303)499-1975

IS IT POP? OR IS IT POOP?

continued from page 278

from the pull-down menu. In addition, you have the choice of enabling sound effects, which are triggered from the keyboard and include a variety of plinks, plonks, drum beats, and assorted samples. Some of these are pretty well known, such as Aisha's fabulous "aoaoaowowowoa" chant, originally from her 12-inch single "The Creator," but heard more widely on The Orb's "The Blue Room." Different keys trigger different samples depending on which kaleidoscopic vision you're currently enjoying, so mapping out the keyboard to develop any real sense of control is a lot of work. In addition, some keys not only trigger a sample but also change some graphic attributes, so your control is limited there also.

However, it's actually a lot of fun messing around with all these things and figuring out what happens in various combinations. The kaleidoscopic visuals really are gorgeous, but I was disappointed that there didn't seem to be greater correlation between the music and what happened on screen—and more disappointed that the visuals seemed to look better when I didn't do any of the work but let the computer randomize things over fairly extended periods of time.

In addition to all these features, *The Groove Thing* can also "listen" to a line signal through the mic input on your computer and thus change the line weight with any music you choose or your voice. Guess what? Bigger beats make the line weight go up and down faster than quiet flowing music—but the effect is not quite as staggeringly wonderful as I'd hoped, and unless you have another output from your player you can't hear the music yourself.

The Groove Thing can be used as a screen saver as is, although it's not really designed that way—you'd have to remember to turn it on before wandering away from your desk. If you have After Dark, there are also some files on the CD-ROM that can be unlocked for an additional fee to work in a more automatic way as After Dark modules.

At a $49.95 SRP *The Groove Thing* would perhaps be a little pricey, but at a street price of around $30 it's well worth checking out. *The Groove Thing* clearly points towards a new category of musical/visual toys. It might quite easily be able to evolve into a variety of cultural expressions with more nutritional substance than its current candy nature.

MUSICNET

MusicNet is an ambitious attempt to increase the flow of information about the latest music releases by both established and new acts, and to subsequently sell those releases via what would traditionally be called mail order—but should now have some new term invented for it, since a combination of fax, phone, and online ordering with overnight delivery deserves a more accurate description than mail order.

The basis of the service is a quarterly CD-ROM available by subscription, allied with an 800 phone number that includes more sound samples, updated news about the acts, and other features than can fit on a CD-ROM. The CD-ROM has 250 releases with sound samples or video clips available, three of about thirty seconds for each release, so you can get a reasonable idea of the range of the album, while the phone service has over three thousand releases available for browsing.

This is a large amount of information to navigate through, but it's

Connectivity Solutions

Novell Authorized Reseller

IBM

COMPAQ

call or email info@miracl.com
Authorized Reseller

HEWLETT PACKARD

Digiboard

SCO
AUTHORIZED RESELLER

Adobe

NEC

Authorized Service for APPLE, COMPAQ systems and HP, OkiData, Citizen, Panasonic, Star Printers

Servers for Novell, UNIX, etc.

IBM PC Server 300 EISA PCI
32 MB RAM
210 MB boot drive 1.44 Floppy Disk
2 2GB Hard Disks
Adaptec SCSI2/PCI controllers
Internal CD ROM Drive
DAT Internal Tape Backup
Ready for Novell
$7,499

Compaq Prosignia 500 5/90
90 Mhz Pentium processor
32 MB RAM, 256K Cache
2.1 GB SCSI Hard Disks
1.44 MB Floppy Disk
Internal CD ROM, Ethernet
3 year Onsite warranty
Ready for Novell
$6,599

Network Printers

Xerox
QMS
Hewlett Packard
$Call

ISDN

Digiboard Datafire	$378
Digiboard PC IMAC/4 -1	$633
Digiboard ethernet ISDN bridge	$1078
Digiboard dual ISDN Bridge	$1460
IBM 7845 NT1 Extended	$335
IBM WaveRunner Digital Fax/Modem compatible with analog fax/modems	$489
Gandalf ethernet bridge with NT1	$1745
Gandalf 10BT bridge with analog voice	$912

Apple

Quadra 630 250 MB Hard Disk
8 MB RAM, CD300I CD ROM Ethnet
10B2 Card, 96 Keyboard
CM2080 14" Color Monitor
$2,199

PowerMac 7100-80
8 MB RAM, Apple Adjustable KB
700 MB Hard Disk, CD ROM
Idek 15" Monitor
$3,699

Novell Station

Intel Pentium 90 MHz processor
Intel Premiere/PCI II Motherboard
256K SRAM cache, 8 MB Memory
Mid-Tower Case, 540 MB IDE HD
Teac 1.44 MB Floppy Drive
Super I/O (dual 16550 UART)
PCI SVGA 1 MB Video Card
Socos 14" NI SVGA Monitor
101 Keytronic Keyboard
MS Serial Mouse / Mouse Pad
MS DOS V6.22 Windows V3.11
$2,139

Telecommuting System

486 DX2-66 VLB motherboard
8 MB RAM 256K Cache
Mini-tower Case 230 W Power Supply
540 MB IDE Hard Disk
Teac 1.44 3.5" Floppy Drive
VLB IDE I/O Controller 2S 1P 1G
Trident 1MB VLB Video, 14" NI Monitor
Digiboard ISDN Interface, 101 Keyboard
Creative Labs Soundblaster and Speakers
Serial Mouse, MS DOS 6.22 Windows 3.11
$1,889

EVEREX Stepnote

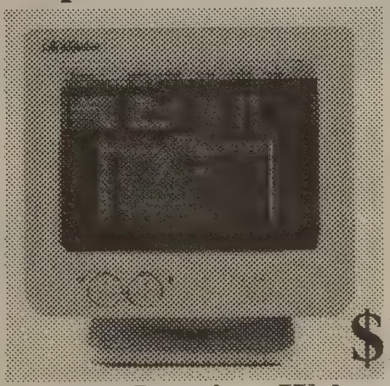
486 DX2/50, Dual Scan
8 MB RAM, 430 MB HD
$2,199

486 DX4/100, Active Matrix
8 MB RAM, 524 MB HD
$3,799

486 DX2/50, Monochrome
4 MB RAM, 250 MB HD
$1,449

All have built in trackball, PCMCIA slots, Microphone & Speaker, low battery warning and are expandable to 20 MB

9" Mono Monitor Paper White VGA



$109

Dealer Inquires Welcome

MIRACLE
COMPUTERS, INC. *SINCE 1985*

Corporate, Government & University P.O.s Welcome
For Orders Call: sales@miracl.com Prices Reflect COD Cash
408-435-8177
780 MONTAGUE EXPWY, SUITE 202
SAN JOSE, CA 95131
FAX: 408-435-8179

CABLE MANUFACTURER DIRECT TO YOU!

MONTHLY SPECIALS

		+10	WHOLESALE
AB2-40-24	2 CONN. IDE CABLE 24"	$0.82	$0.72
AB3-40-24	3 CONN. IDE CABLE 24"	0.83	0.73
AB3-50-26	3 CONN. SCSI CABLE 26"	1.05	0.93
AF5-34-29	5 CONN. FDD CABLE 29"	0.92	0.83
VKPB06450006	POWER CENTER 6 FT	10.50	9.50
624478-002	1/SERIAL 1/SERIAL+PARALLEL (FOR INTEL MAINBOARD 2PCS/1SET W/2PCS BRACKET)	1.53	1.33
W2351803006-S	POWER CORD. 6FT. 18WG UL/CAS	0.78	0.70
CD-47-1	SONY TO SOUND BLASTER (SONY/PANASONIC/MITSUMI/TOSHIBA/NEC TO IDE SOUNDBLASTER W/LOCK)	1.00	0.64
CD-19	4X SPEED TO SOUND BLASTER (PANASONIC)	0.58	0.49
CD-51	NET TO SOUND BLASTER	0.58	0.49
MOUSE-1	MOUSE	4.60	3.90
AU-002TO1PAB	AUTO SWITCH 2 COMPUTER/1 PRINTER	7.50	6.90

• OVER 3000 ITEMS IN STOCK & AVAILABLE...Call For Details

•CUSTOM OEM & ODM CABLE AVAILABLE...PLEASE CALL• 1 YEAR WARRANTY ON ALL ITEMS

Cable & Accessories, Inc.

150 COMMERCIAL ST. SUNNYVALE, CA 94086
(Off Kifer Rd. Between Lawrence Exp. & Wolfe Rd.)
Mon - Fri 9am-7pm • Fax: (408) 735-8905 • TEL: (408) 735-8889

What's the code?

MICROTIMES ADVERTISING.

Greater profit,
increased sales,
and more customers.

Call
(510) 934-3700
for more information.

IS IT POP? OR IS IT POOP? *continued...*

basically surprisingly easy. The CD-ROM can be searched by genres of music, alphabetically by artist, or by whether the clips are video, audio, or only available over the phone. It's fast and, while you might quibble over the details of which genre category an artist might fit into, I had no trouble finding relatively obscure artists by searching alphabetically in the All category.

The first issue of the CD-ROM is based on *Rolling Stone* magazine's *1994 Rock & Roll Yearbook* for content, but includes some fairly up-to-the minute releases, such as Massive Attack's "Prevention." Each release is treated separately; thus Jimi Hendrix, for example, has entries under both "Blues" and "Woodstock." There's a review of each release or a synopsis of several reviews along with a complete track listing and a discography, which is, alas, not always complete. Negative comments appear not to have been included.

The phone service worked well when I tried it, given the limitations of phone lines and tiny speakers along with the need to navigate a huge information tree using only twelve keys. You can access artists either by spelling their names (and think of how a name like Black Uhuru translates on those twelve keys, 25225 84878, and the competing names of Black Sabbath, Black Sheep, Black/Note, Blackfoot, Blackgirl, Black Hawk, and Blackstreet, but the system responded pretty much instanteously at the first "U") or more conveniently by using a five-digit code that unfortunately comes (so far) only with the accompanying booklet rather than on the CD-ROM.

All told, this is a massive project and has been done better than acceptably well. It's not designed to be a multimedia music encyclopedia, but you could certainly use it for a limited amount of reference. The prices are competitive with retail stores, especially if you're buying more than one release, as there's a standard $3.95 shipping charge regardless of how many titles you order. I don't think it's a complete replacement for stores, however, even with the preview advantages it offers. There's a certain social element to stores along with some serendipity in stumbling across something obscure that you'd never find elsewhere. I even use stores as a gambling substitute, buying stuff I've never heard of just because I like the artist's name or the sleeve design—sometimes I win, sometimes I lose!

Additionally, for the real music junkie, a quarterly offering is not enough—shipments of limited pressings come in from Europe every week, the vast majority of which never have American release. And, like every store, MusicNet simply doesn't have some artists or releases in its inventory—there's no Psychic TV or Adrian Sherwood, for example. However, MusicNet is aware that there's room for improvement and already has plans to add other features and, no doubt, artists.

The history of innovative and alternative systems of music retailing has had some great successes in the past, as well as some perplexing failures. There's obviously been a lot of thought put into MusicNet and it's a system that deserves to be checked out. It will be very interesting to see how MusicNet evolves over the next year or so. ■

Copyright © 1995 by Jonathan E. All rights reserved.

Focus On The Future
Get The Best Components Today!

MOTHERBOARD WITH CPU

486 SLC-40	$75
486 SLC2-66	$139
486 Blue Lightning 75	$209
486 DX2-66 w/256K	$199
486 DX2-80 w/256K	$225
486 DX4-100 w/256K	$275
NEXTGEN 586-90	$569
PENTIUM 60 w/256K	$465
PENTIUM 90 w/256K	$635

KEYBOARDS

Montery 101 Enhanced	$15
Keytronic 101	$26
Focus 2001	$35
Focus 7000 w/Trackball	$38
Focus 8000 w/Calculator	$39
Focus 9000 w/Calculator, Programable	$50
Fun Touch Children's Keyboard	$49
Kool Touch Children's Keyboard	$49
SIIG Mini Touch	$45

CALL FOR GREAT PRICES ON HARD DISKS !!!

MODEMS

MaxTech 14,400 Voice Fax/Modem	$65
SIIG 28,800 Fax/Modem Internal v.34	$129
US Robotics 28800/28800 Fax/Modem	$225

CONTROLLER CARD

Adaptec 1542 (OEM)	$170
Adaptec 2842	$239
Promise 2300 Enhanced IDE	$59
Holtek Enhanced IDE	$25
SIIG Dual IDE VLB (Enhanced IDE)	$55
SIIG SCSI PRO (16 bit)	$69
SIIG SCSI PRO VL (32 bit)	$99

16 BIT SOUND CARD

Sound Blaster 16 Basic (OEM)	$69
Sound Blaster 16 MCD (OEM)	$75
Sound Blaster 16 SCSI-II (OEM)	$109

CD TITLES

T.J. Finds a Friend	$9
Doom Mania	$9
Microsoft Home Bundle	$75
•Encarta '95•Works•Golf•Dangerous Creatures•CD Sampler	
Microsoft Encarta '95	$30
Cyber Pack I (14 Titles on 3 CDs)	$39
Cyber Pack II (17 Titles on 3 CDs)	$49

GRAPHIC CARDS

Diamond Stealth 64 VRAM 2MB	$275
Diamond Viper VLB 2MB VRAM	$239
Diamond SpeedStar PCI 1MB	$115
Spider 32 plus	$95
Spider 64 DRAM 2MB	$159
Spider 64 Tarantula VRAM 4MB	$259
ATI Mach 64	CALL

CD-ROM DRIVE

Panasonic 2X CR562	$119
Sony 2X 55E IDE	$115
Toshiba 4X SCSI 3501B	$299
Misumi 4x IDE FX400	$199

SVGA MONITORS

14" .28 NI LR Panatronix	$199
14" .28 NI Three I	$209
15" .28 NI Three I Analog	$289
15" .28 NI Three I Digital	$299
17" 1024x768 Special Edition	$450

SPEAKERS

2 Watt	$8
70 Watt	$35
80 Watt	$45
100 Watt	$49
120 Watt	$59

CYBER STATION CD-ROM KIT I

-Double Speed CD-ROM Drive
-Acer 16-Bit Sound Card
-Speakers
-17 CD Titles on 3 CDs

- Compton's Interactive
- Mavis Beacon Teaches Typing (MPC)
- The Software Toolworks U.S. Atlas
- The Software Toolworks World Atlas
- The Chessmaster 4000
- Velocity's JetFighter II
- Velocity's Spectre
- Microsoft Encarta '95
- 4 in Row
- 7 Colors
- The Light Corridor
- Drakkhen
- NineCoins
- Alien Force
- Brain Drain
- Hexagames
- Pipsuesk
- Shih Dao

Add $100 for 4X Speed CD-ROM

$195

CYBER STATION CD-ROM KIT II

-Double Speed CD-ROM Drive
-Acer 16-Bit Sound Card
-Speakers
-11 CD Titles on 2 CDs

- Microsoft Encarta '95
- 4 in a Row
- 7 Colors
- The Light Corridor
- Drakkhen
- NineCoins
- Alien Force
- Brain Drain
- Hexagames
- Pipsuesk
- Shih Dao

Add $100 for 4X Speed CD-ROM

$189

Albany • Berkeley
1533 Solano Ave.
510/527-1388
FAX 510/527-7006

El Sobrante • Richmond
3767 San Pablo Dam Road
510/758-8455
FAX 510/758-8492

Oakland • Piedmont
4098 Piedmont Avenue
510/652-5268
FAX 510/652-5380

Hayward • San Leandro
1933 Davis Street, Suite 262
510/568-1688
FAX 510/568-6888

Prices subject to change without notice. Not responsible for typographical errors.

5 Years Labor 1 Year Parts Computer Warranty

✓ ALL SYSTEMS CERTIFIED Microsoft Novell Certified NetWare Engineer

ECI 486 DX2-80/DX4-100 AMD VLB SYSTEMS

- AMD 486 CPU
- 256K External Cache
- 4MB RAM, Expandable to 128 MB (72 Pin)
- 1.44 MB Floppy Drive
- 420MB IDE Hard Drive
- VLB IDE Controller w/2S, 1P, 1G
- 32-Bit VLB SVGA Graphics Accelerator Card w/1MB
- Pentium OverDrive Ready with on board ZIF Socket
- Mini-Tower Case w/230W P/S
- 14" SVGA Color Monitor, 1024x768, .28dp, NI
- 101 Keyboard
- Hi-Res mouse w/Mouse Pad
- Free MS DOS 6.2

DX2-80 ....$999
DX4-100 ....$1035

ECI IBM 486 75 MHZ BLUE LIGHTNING

- 75MHz VLB (Motherboard Made in USA by IBM)
- 16 KB Internal and 256 KB Ext Cache
- Math Co-Processor
- 4MB exp to 64MB on board (4 72-pin Slots)
- 2 VESA Local Bus and 7 16-Bit ISA Slots
- IDE/FDC/2S/1P on Board
- Overdrive CPU Socket
- 1.44 MB Floppy Drive
- 420MB Hard Drive
- 32-Bit VLB Video Card w/1MB
- 14" SVGA NI Monitor 1024x768 .28dp
- Mini Tower Case w/230W Power Supply
- Enhanced 101-Key Keyboard
- Hi-Res Mouse
- Free MS DOS 6.2

$929

INTERFACE CARDS

AT I/O card 2S/1P/G	$12
Mono graphic/printer	12
Serial/printer/game/card	12/12/12
IDE HD/FD w/2S IP VLB	19
IDE dual HD/FD cont ISA	12
IDE 4FD/4HD 2S, 1P, 1G	59
SCSI ISA Controller	69
PCI IDE Controller	19
PCI SCSI NCR Controller	59
PCI SCSI NCR w/BIOS Controller	115
IDE HD/FD w/2S (16550) 1P	39
AT I/O w/2S/16550) 1P	29
IDE VLB w/2S (16550) 1P, 1G	45
SCSI VLB (Adaptec Chipset)	85

ECI MULTIMEDIA 486DX2-80/DX4-100 AMD VLB SYSTEMS

- AMD 486 CPU
- 256K External Cache
- 4MB RAM, Expandable to 128 MB (72 Pin)
- 1.44 MB Floppy Drive
- 420MB IDE Hard Drive
- VLB IDE Controller w/2S, 1P, 1G Ports
- VLB SVGA Graphics Accelerator Card w/1MB
- Pentium OverDrive Ready with ZIF Socket
- Mini-Tower Case w/230W Power Supply
- 14" SVGA Color Monitor, 1024x768, .28dp, NI
- Double Speed CD-ROM Drive
- 16-Bit Sound Card w/CD Interface
- Multimedia Speakers
- 3 CD Titles:

-Family Health Book
-Compton's Interactive Encyclopedia
-Return to Zork

- 101 Keyboard
- Hi-Res mouse w/Mouse Pad
- Free MS DOS 6.2

DX2-80............$1219
DX4-100 ....$1249

ECI 486DX2-66/DX4-100 INTEL VLB SYSTEMS

- Intel 486 CPU
- 256K External Cache
- 4MB, Expandable to 128 MB (72 Pin)
- 1.2 & 1.44 MB Floppy Drive
- 540MB IDE Hard Drive
- VLB IDE Controller w/2S, 1P, 1G Ports
- VLB SVGA Accelerator Card w/1MB
- Pentium OverDrive Ready with ZIF Socket
- Mini-Tower Case w/230W Power Supply
- 14" SVGA Color Monitor, 1024x768, .28dp, NI
- 101 Keyboard
- Hi-Res mouse w/Mouse Pad
- Free MS DOS 6.2

DX2-66 ....$1059
DX4-100 ....$1149

MOUSES

LOGITECH

First Serial	$39
Mouseman Serial 400dpi	59
Trackman Serial	79

Microsoft

Microsoft Serial	$59
Microsoft bus	79

KENSINGTON

Turbo Mouse 4.0	$95

Includes a new software package that lets you customize the cursor control. Features comfortably positioned, and easy to press.

ECI PENTIUM 90/100 INTEL PCI SYSTEMS

- Pentium 90/100 Motherboard
- Intel Pentium 90 MHz CPU
- CPU Cooling Fan
- 256K External Cache
- 8MB RAM, Expandable to 128MB (72 Pin)
- 1.2 & 1.44 MB Floppy Disk Drives
- 850MB IDE Hard Disk Drive
- PCI IDE Controller w/2S (16550) & 1P Port on board
- ATI Graphic Plus 32 PCI w/2MB DRAM
- Full-Tower Case w/250W Power Supply
- 15" SVGA Color Monitor, 1280x1024, .28dp, NI
- 101 Keyboard
- Hi-Res Mouse w/Mouse Pad
- Free MS DOS 6.2

Pentium 90 MHz $2019
Pentium 100 MHz ..$2195

Multimedia Upgrade for ECI Pentiums:

- Quad Speed CD-ROM Drive
- 16-Bit Sound Card w/CD Interface
- Multimedia Speakers
- 3 CD Titles:

-Family Health Book
-Compton's Interactive Encyclopedia
-Return to Zork

ADD..............................$295

ECI MULTIMEDIA 486DX2-66/DX4-100 INTEL VLB SYSTEMS

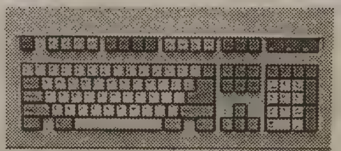
- Intel 486 CPU
- 256K External Cache
- 4MB RAM, Expandable to 128 MB (72 Pin)
- 1.2 & 1.44 MB Floppy Drive
- 540MB IDE Hard Drive
- VLB IDE Controller w/2S, 1P, 1G Ports
- 32-Bit VLB SVGA Graphics Accelerator Card w/1MB
- Pentium OverDrive Ready with on board ZIF Socket
- Mini-Tower Case w/230W Power Supply
- 14" SVGA Color Monitor, 1024x768, .28dp, NI
- Quad Speed CD-ROM Drive
- 16-Bit Sound Card w/CD Interface
- Multimedia Speakers
- 3 CD Titles:

-Family Health Book
-Compton's Interactive Encyclopedia
-Return to Zork

- 101 Keyboard
- Hi-Res mouse w/Mouse Pad
- Free MS DOS 6.2

DX2-66 ....$1349
DX4-100 ....$1449

KEYBOARDS



Maxi 101 Keyboard	$24
Keytronic 101 Key	24
ECI 101 Key	14
Enhanced 102 Key	59
Focus 9000 129 Key	54
Focus 2001 Click 101 Key	39
Proxellent 121 Key (Programmable)	75
Microsoft Natural Keyboard	89

ECI PENTIUM 66/75 INTEL PCI SYSTEM

- Intel Pentium CPU
- 256K External Cache
- 8MB RAM, Expandable to 64MB (72 Pin)
- 1.2 & 1.44 MB Floppy Disk Drives
- 850MB IDE Hard Disk Drive
- PCI IDE Controller
- 2 Serial, 1 Parallel, 1 Game Ports
- ATI Graphic Plus 32 PCI w/2MB DRAM
- Full-Tower Case w/250W Power Supply
- 15" SVGA Color Monitor, 1280x1024, .28dp, NI
- 101 Keyboard
- Hi-Res Mouse w/Mouse Pad
- Free MS DOS 6.2

Pentium 66 MHz $1649
Pentium 75 MHz $1829

Multimedia Upgrade for ECI Pentiums:

- Quad Speed CD-ROM Drive
- 16-Bit Sound Card w/CD Interface
- Multimedia Speakers
- 3 CD Titles:

-Family Health Book
-Compton's Interactive Encyclopedia
-Return to Zork

ADD..............................$295

SYSTEM UPGRADES

Memory Upgrades to 8/16/32	CALL
420MB to 540MB IDE Hard Drive	Add $29
540MB to 730 MB IDE Hard Drive	Add $65
540MB to 850 MB IDE Hard Drive	Add $75
850MB to 1.0GB IDE Hard Drive	Add $149
15" FS NI LR 1280x1024 .28	Add $89
15" Viewsonic V15/15G FS .28 NI LR	Add $209/185
15" ADI .28 FS NI LR	Add $149
17" Viewsonic V-17G/V-17 .28 NI LR FS	Add $495/599
17 ADI .26 SAP 1280x1024 NI LR FS	Add $455
17" Sony .25 GDM 17SEI	Add $729
17" Hitachi NS 1764 .26 NI FS LR	Add $449

MOTHERBOARDS

IBM

VLB 486SLC2-66MHz/64K/387SX	$139
VLB 486 75MHz Blue Lightning	199

ECI

VLB 486-33/50/66 256K w/o CPU	$109
PCI 486 w/256K w/o CPU	149
Opti VLB & PCI P5-60, 66MHz w/256K w/o CPU	129
Opti VLB & PCI P5-90, 100MHz w/256K	199

INTEL

Pentium 90/100 PCI w/256K w/16550 Chip, Main Board by Intel	$319

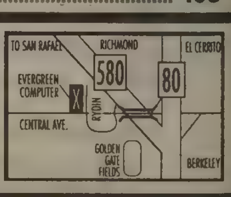
Acer

VLB SIS-471 486 w/256K (AMI BIOS)	$105

EVERGREEN

Computer International, Inc.
2700 Rydin Road #C, Richmond, CA 94804
(510) 526-8667 FAX (510) 526-1447

VISA AMERICAN EXPRESS MasterCard DISCOVER



The Leader In The East Bay For 10 Years!

✓HARD DRIVES

Quantum™

540MB IDE	$189
540MB SCSI LT	225
2.1GB SCSI	859
4.0GB SCSI 4301S	1399

Maxtor®

540MB IDE	$185
850MB IDE	245

WESTERN DIGITAL

540MB IDE	$205
850MB IDE	258
1.2GB IDE	389

MICROPOLIS®

3.0GB SCSI MC1936 13ms 5.25"	$935
4.2GB SCSI MC3243 8.5ms 3.5"	1569

Seagate

1.0GB SCSI 9ms	$589
1.0GB IDE	335

CONNER

420MB IDE	$175
850MB IDE	259
1.08GB SCSI 10ms	435
2.1GB SCSI	859

SCSI CONTROLLERS

adaptec

1505	16-Bit ISA Total CD SCSI-2	$59
1515	16-Bit ISA Total Connect SCSI-2 Kit	89
1522	16-Bit ISA SCSI-2 7 Device & FD Kit	135
1542CFK	16-Bit Bus Master Fast SCSI-2Kit/Card	235/199
1640	32-Bit MicroChannel for PS/2, 7HD Kit	299
2742T	32-Bit Wide EISA Kit, 14HDs	349
2742W	32-Bit Wide EISA Kit w/Wide Cable	379
2825VL	32-Bit VLB E-IDE/SCSI-2 Kit	169
2842A-VL	32-Bit Fast SCSI-2 VLB Kit	249
APA-1450	Slim SCSI PCMCIA Kit "New Release"	199
APA-4510	Card Park PCMCIA Card Reader "New"	189
2940	32-Bit PCI SCSI-2 Kit RISC-Based I/O	279
2940W	32-Bit PCI Wide Kit w/Wide Cable	349
T348	Parallel to SCSI Plus 250KB/S	125
T358	Parallel to SCSI EPP 1MB/S	159

BUS LOGIC

KT445C	32-Bit VLB Fast SCSI-2 Kit	$199
KT545C	16-Bit ISA BusMaster Fast SCSI-2 Kit	209
KT742A	32-Bit EISA SCSI-2 Kit	289
KT747C	32-Bit EISA Fast SCSI-2 Kit	299
BT757S	32-Bit EISA Fast Wide SCSI Card	349
SW-190	Software Drivers for BT757S	49
KT946C	32-Bit PCI Fast SCSI-2 Kit	259
KT956C	32-Bit PCI Fast Wide SCSI-2 Kit	315

✓MONITORS

ViewSonic™

6e	14"	1024x768 .28 NI	$269
15	15"	1280X1024 .28 NI LR FS	425
15G	15"	1024X768 .28 NI LR FS	395
V17G	17"	1280X1024 .28 NI MAC LR FS	709
V17	17"	1600X1024 .28NI MACII LR FS	825
20PS	20"	1600X1280 .25 NI	1399
20G	20"	1600X1280 .28 NI	1229
21PS	21"	1600X1280 .25 NI	1635

NEC

15"	XV15	NI 1024x768 .28mm	$445
15"	XE15	NI 1024x768 .28mm XGA-2	545
15"	XP15	1024x768 .28mm 76Hz	647
17"	XE17	1024x768 .28mm	979
17"	XP17	1280x1024 .28mm 76Hz	1199
21"	XE21	1280x1024 .28mm 76Hz	1929
21"	XP21	1600x1200 .28mm 76Hz	2339

SONY.

CDP	15SF	15" 1280x1024 .25	$445
CDP	17SF	17" 1280x1024 .25	859
GDM	17SE1	17" SVGA .25dpi	965
GDM	20SE	20" State-of-the-art	1789

SVGA MONITOR

14"	SVGA	NI 1024x768 .28 Green	$225
15"	SVGA	NI FS 1280x1024 .28 Green	309
17"	SVGA	NI FS 1024x768 .39 Green	445

ADI

4GP	15"	NI 1280x1024 .28 LR FS	$355
5AP	17"	NI 1280x1024 .26 LR FS	679
5EP	17"	NI 1280x1024 .28 LR FS	635

PROTON

14" SVGA Monitor GM 1449 1280x1025, NI	$235
15" SVGA Monitors GM1563 1280x1024, .28dp NI	325

HITACHI

Superscan 15S CM1586 1280x1024 .28dp	$355
Superscan 17 NS1764 1280x1024	695
Superscan Elite 17 CM1797 1600x1200 .26dp	969

EYE-Q

14" Amber	$85
14" VGA Monot	105

EXTERNAL SCSI DRIVE CASES

- High Quality Metal Cases
- 2 Centronics Output
- Noise-Free Fan
- External SCSI ID Switch
- Power Cable & Hardware

For 3.5" or 5.25" Half Height $75/79

✓VIDEO

ATI TECHNOLOGIES INC

MACH 64 PRO TURBO	
4MB VLB/PCI OEM	$449
2MB VLB/PCI OEM	269
Graphics Expression PCI/VLB/ISA 1MB/2MB DRAM	145/179
Graphics Ultra Pro PCI/VLB/ISA 2MB VRAM	229
Graphics Ultra Plus PCI/VLB/ISA 2MB DRAM	149

Diamond

Stealth Pro VLB 1/2MB OEM	$205/285
Speed Star Pro SE VESA/PCI 1MB DRAM	109
Viper SE 2MB VRAM PCI/VLB OEM	279
Stealth 64 4MB VRAM PCI/VLB OEM	425
Stealth 64 2MB VRAM PCI/VLB OEM	275
Speed Star Pro SE 1MB DRAM PCI/VLB	109

ORCHID

Kelvin 64 PCI/VLB OEM 2MB DRAM	$179
1MB DRAM (Upgradable to 2MB)	139
Fahrenheit 64VLB 1MB	139

MATROX GRAPHICS INC.

Impression Plus, PCI	$339
4MB Memory Upgrade	249
Ultima Plus, VLB	339
4MB Memory Upgrade	235
Ultima, VLB	309
Impression Lite PCI/VLB	289/309
Windows Accelerator VLB w/1MB (CL-GD5428)	75
Windows Accelerator VLB (S3-805)	69
Windows Accelerator PCI w/1MB (S3-805)	108
Windows Accelerator PCI w/2MB (ET-400P)	158

TAPE BACKUPS

CONNER TAPE DRIVES

250 MB Internal	$149
250 MB External Parallel Port	299
420 MB Internal	175
420 MB External Parallel Port	329
850 MB Internal	275
850 MB External Parallel Port	409

COLORADO TAPE DRIVES

250 MB Internal	$145
250 MB External Parallel Port	265
350 MB Internal	175
350 MB External Parallel Port	385
700 MB Internal	259
700 MB External Parallel Port	395
1.36 GB Internal DJ-50	389

CASE & POWER SUPPLY

Minitower 230 Watt #609	$47
Desktop w/230 Watt #109	47
Mid Tower w/230 Watt #919	62
Full Tower w/250 Watt #709	99
Mid Tower w/230 W w/2Fan #907	89

HOURS: 9:00-5:30 Sat 10-5

5 Years Labor, 1 Year Parts Warranty on Evergreen Computers.
Prices subject to change w/o notice.
Not responsible for typos.
PRICES BASED ON CASH PRICES ONLY

(510) 526-8667

FAX (510) 526-1447

EVERGREEN

LET US UPGRADE YOUR COMPUTER THOUSANDS OF ITEMS IN STOCK!

✓FAX MODEMS

USRobotics

14.4/14.4 Sportster Fax/Modem Int/Ext	$95/115
28.8 Sportster V.34 Int/Ext	$219/249

PRACTICAL PERIPHERALS

14.4 Fax/Modem Int/Ext	$95/119
14.4 Fax/Modem PCMCIA	$199

BOCA

14.4 Fax/Modem Int/Ext	$89/119

CARDINAL

28.8 Fax/Modem v.34 External	$179

SIIG (5 Year MFG. Warranty)

14.4/14.4 Fax/Modem Internal	$59
Group 3 Compatible, 16550 UART Bit Com & Bit Fax s/w, Supports up to Com 7 & IRQ-9	
28.8 v.34 Fax/Modem Internal	$189

✓GRAPHICS

HP SCANJET IIICX SCANNER

- 2400-dpi enhanced resolution (600-dpi optical) produces highly accurate scans
- One-pass, 24-bit color scanning
- Includes new HP AccuPage 2.0 technology

NEW

$949

FlatBed Award Winning PC

TAMARACK and MAC Scanner

Color Scanner 600dpi, 24 Bit
Optional SKT Slide Scanner

ArtiScan™ from Tamarack gives you state-of-the-art resolution and impeccable image quality, 600 dpi, 24 bit per pixel (16 million colors and 256 gray levels). Supports both the PC and the Macintosh.

SCSI interface for fast operation.

-with Photoshop 3.0 LE & OCR S/W
600/800/1200 dpi $485/585/685

✓PRINTERS

EPSON

STYLUS COLOR INKJET PRINTER

- 720x720 max resolution
- 48 nozzlels per color
- 240 cps @ 12 cpi
- 5 bitmap, 4 scalable fonts
- 2-year limited warranty

720dpi! Picture-like quality!

$529

LQ-1070 PLUS

24-pin Printer
- 135 Column
- 11 Fonts
- 2 Scalable Fonts 252 cps Draft Mode 84 cps
- 2-Year Warranty

$379

STYLUS 400 INKJET PRINTER

- 360dpi
- 120 cps printing speed
- 2-year warranty

$199

LQ-570 PLUS

- 24 pin, 112 cps, 80 columns
- Four Scalable fonts

$249

HP TONER CARTRIDGES

HP 92275A HP IIP, IIP+, IIIP	$69
HP 92295A HP IID, II, III, IVD	69
HP 92291A HP IIISi, IVSi	119
HP 92298A HP4 4+, 4P, 4MP	99
HP 92274A HP4L 4ML	69
HP C3900A 4V, 4MV	179

✓PRINTERS

HEWLETT PACKARD

DeskJet/DeskWriter Portable 320	$299
DeskJet 540, 600dpi, InkJet (Color Optional)	299
DeskJet 560C, 600dpi, Color InkJet	489
DeskJet 1200c 300dpi, 7ppm, Color Inkjet	969
DeskJet 1200c/PostScript	1529
LaserJet 4MV 600 dpi, 16ppm laser, 12MB	2695
LaserJet 4V 600 dpi, 16ppm laser, 4MB	1849
LaserJet 5MP 600 dpi, *3MB NEW*	CALL
LaserJet 4M+ 600 dpi, 12ppm, 6MB	1859
LaserJet 4L 300 dpi, 4ppm, 1MB	519
LaserJet 4+ 600dpi, 12ppm, 2MB	1375
LaserJet 5P 600 dpi, *NEW*	965
LaserJet 4si 600 dpi, 17ppm, 2MB	2839
LaserJet 4simx 600 dpi 17ppm, 10MB	3989

Canon

BUBBLE JET PRINTERS PJC-4000 COLOR INKJET

- 720x360 dpi text
- 360x360 dpi graphics
- 16.7 million colors
- 5ppm print speed
- 2-Year limited Warranty

$365

BJC-600E Color 720x360	$499
BJ-10sx Portable	249
BJ-200e *NEW*	249
BJ-230 110 column 360x360 DPI	399
LBP-1260 Laser 600 DPI, 12PPM	1339

brother

HL-630 Laser Printer
- 300 DPI 6ppm, 45 Fonts, 512K Memory
- 1 Year Limited Warranty $399

HL-645 Laser Printer
- 300x300 DPI 6ppm, 1MB Memory
- 1 Year Limited Warranty $469

HL-660 Laser Printer
- 600 DPI 6ppm, 2MB Memory
- 1 Year Limited Warranty $689

HL-655 Laser Printer
- 300x300 DPI 6ppm, 2MB Memory
- For IBM & MAC
- 1 Year Limited Warranty $579

HARD DISK DRIVES

	INT*	EXT
QUANTUM		
540MB	$239	$329
2.1GB	899	989
CONNER		
1.0GB	$479	$569
2.1GB	899	989
SEAGATE		
1.0GB	$599	$686
2.1GB	1099	1189
MICROPOLIS		
3.0GB 5.25"	$965	$1055
4.2GB 3.5"	1569	1659

Add $25 for Mac Hard Disk Drivers
(Charismac Anubis OEM)

SYQUEST REMOVABLE DRIVES

	INT*	EXT
200MB 5.25"	$359	$449
270MB 3.5"	339	429

Add $25 for Mac Hard Disk Drivers
(Charismac Anubis OEM)

CARTRIDGES

44MB/88MB	$49/69
105MB/200MB	69/199
270MB	89

MACINTOSH UPGRADE CENTER

PRINTERS

EPSON	
Stylus Color	$529
HEWLETT PACKARD	
320 DeskWriter	$299
540 DeskWriter	289
560C DeskWriter	479
5MP LaserJet New	CALL
4M Plus LaserJet	1859
4MVLaserJet	2695
4SiMXLaserJet	3989

SCSI CASES

3.5" Designer Case	$79
5.25" Designer Case	79
2-Bay (Full Height) Case	159
4-Bay Case	229
7-Bay Case	349

CD-ROM DRIVES

	INT	EXT
Chinon CDd-535 2X Speed	$199	$289
NEC 4XI OEM 4X Speed	329	419
Toshiba XM-3501B 4X Speed	299	389
Pioneer DRM-602X 6-Disk Changer		399

Add $25 for Mac Hard Disk Drivers
(Charismac Anubis OEM)

MODEMS

US ROBOTICS	
14.4 Data/FAX Sportster Mac&Fax	$129
28.8 Data/FAX Sportster Mac&Fax	269

PRACTICAL PERIPHERALS	
14.4 Data/FAX MCMT	$129
28.8 v.34 Fata/FAX MCMT	239
GLOBAL VILLAGE	
14.4 Data/Fax Teleport Gold II	$139
28.8 Data/Fax Teleport Platnium	299

AMERICAN POWER CONVERSION

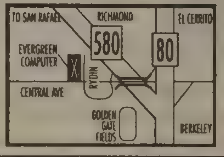
BACKUP POWER SUPPLIES AT GREAT PRICES!

APC Power Manager	$79
APC Power Manager w/Tel	89
APC 280VA Back-UPS	119
APC 450VA Back-UPS	199
APC 600VA Back-UPS	249
APC 600VA Smart-UPS	389
APC 900CA Smart-UPS	549
POWERCHUTE™ PLUS	
For Novell NetWare	$89
For OS/2	89
For UNIX/Xenix	129
For Windows NT	89

EVERGREEN

Computer International, Inc.
2700 Rydin Road #C, Richmond, CA 94804
(510)526-8667 FAX (510)526-1447

VISA
MasterCard



THE BEST IN NOTEBOOKS AND MULTIMEDIA!
WE SPECIALIZE IN GREAT CUSTOMER SERVICE

✓YOUR NOTEBOOK HEADQUARTERS

SHARP NOTEBOOK COMPUTERS

NEW

Features:

- 32-Bit Graphics Accelerated VLB Video w/1MB VRAM 640x480 256-Color Display (1024x768 on External Monitor)
- One PCMCIA Type III or Two PCMCIA Type II Slots Serial, Parallel, SVGA, Keyboard/Mouse, Expansion Bus, and Infrared Ports
- 16-Bit Stereo Audio w/Built-in Stereo Speakers and Microphone
- External Microphone, Stereo-In, and Stereo-Out Ports
- 1.44 MB Floppy Disk Drive (removable for Second Battery)
- 3 to 4 Hours NiMH "Smart" Battery (6 to 8 Hours w/Second Battery)
- 85-Key Keyboard w/12 Function Keys GlidePoint Trackpad
- MS-DOS, Windows, Online Manual, America Online, CompuServe, Checkfree
- 6.2 lbs, 11.62"x8.85"x1.96"

SHARP PC-8700 ....$2359
Intel 486DX2-50
4MB RAM (exp to 32)
Removable 250MB Hard Drive
Active Matrix 256-Color Display
1 Year Warranty

SHARP PC-8900 ....$3549
Intel 486DX4-75
8MB RAM (exp to 32)
Removable 320MB Hard Drive
Active Matrix 256-Color Display
3 Year Warranty
MANY OPTIONS AVAILABLE!

CHEMBOOK 9400 SERIES MULTIMEDIA NOTEBOOK COMPUTER

Features:

- Intel 486DX2-66 or 486DX4-100 CPU
- 128K AMI BIOS w/ Password Security
- 4MB RAM On Board, Expandable to 8/12/20/36MB
- 340MB, 2.5" Removable Hard Disk Drive
- 3.5", 1.44MB Floppy Disk Drive Built-in
- Built-in Speakers and Microphone
- Sound Blaster Compatible
- One PCMCIA Type III or Two PCMCIA Type II Slots
- One Serial Port
- One Parallel Port
- SVGA Port (1024x768)
- External Keyboard Connector
- Docking Station Connector
- 2 Hour NiMH Battery Pack
- 86-Key Keyboard, Palmrest, and Built-in Trackball
- 2 Hour Fast Charge
- Full Range AC Adapter/Charger (1 lb.)

	DX2-66	DX4-100
Mono 64GX	$1419	$1489
Dual Scan	$1829	$1899
Active Color	$2549	$2629

CALL For 9500 w/CD-ROM Notebook!

CHEMBOOK 3900 SERIES PENTIUM MULTIMEDIA NOTEBOOK COMPUTER

Features:

- Intel Pentium CPU
- 128K AWARD BIOS w/ Password Security
- 8MB RAM On Board, Expandable to 16/24/40MB
- 520MB, 2.5" Removable Hard Disk Drive
- 3.5", 1.44MB Floppy Disk Drive Built-in
- Built-in Speakers and Microphone
- Sound Blaster Compatible
- One PCMCIA Type III or Two PCMCIA Type II Slots
- One Serial Port (16550)
- One Parallel Port (EPP)
- SVGA Port (1024x768) 256 Color
- I/R Link (HP Standard)
- Docking Station Connector
- 2 Hour NiMH Battery Pack
- 86-Key Keyboard, Palmrest, and Built-in Trackball
- 2 Hour Fast Charge
- Full Range AC Adapter/Charger (1 lb.)

Dual Scan Color 75/90MHz.....$2795/2999
Active Color 75/90MHz...........$3795/3999

CD-ROM DRIVES & MULTIMEDIA KITS

TOSHIBA XM5302 IDE

- IDE 4X Speed CD-ROM Kit
- 190ms 600 KB/Sec
- Includes: Atapi Interface Controller
- Audio Cable CD-ROM Data Cable
- CD-ROM Title: The Journeyman Project

$229

NEC 3XI TRIPLE SPEED

CDR-510 195ms, 450KB/s **$249**

NEC 4xi MULTISPIN SCSI II

- Internal 4X Speed, 256K Cache
- 600KB/Sec, 220ms Access Time

$295

PIONEER®

- High Speed CD-ROM
- MiniChanger, featuring QUADRASPIN™

DRM-624X

NEW

- External SCSI/SCSI-2 Subsystem
- 6-CD-ROM Magazine
- Software for MAC or IBM
- 190ms/Fast 4.4X

$669

DRM-1804X

- External SCSI/SCSI-2 Subsystem
- Up to 18-CD-ROM discs
- 3 (6-disc) magazine changer
- 300ms/Fast 614Kb/Sec

$CALL

6-CD Magazine $29

TOSHIBA 3601B

- SCSI-II Fast 4X Speed CD-ROM
- 150ms/660KB/Sec
- Multi-Spin/Multi-Speed
- 256K Cache Buffer
- Caddy Included

$319

External $395

TEAC

Super Quad 4X Speed

- 600KB/Sec 195ms
- AT Interface **$179**

SONY

- CDR 55E Double Speed IDE
- 250ms/300KB/Sec **$119**

MITSUMI CD ROM Kit

- Quad Speed w/16 Bit Sound Card
- IDE Interface
- 230ms 600KB/sec
- CRMC-FX400 .... **$239**

PANASONIC 562 (MATSUSHITA)

- AT Double Speed
- 320ms/320KB/SecTransfer Rate
- Photo-CD Compatible

Internal Drive $129

CHINON CD 535

- 2X-SCSI 2X Speed
- 256K Cache & 64K Buffer
- Photo CD Compatible **$185**

MEDIA MAGIC CD-ROM INTERFACE

- Supports AT-Bus CD-ROM Drives, SONY & Panasonic
- Internal CD-ROM Audio Connector.. **$65**

CREATIVE LABS SB

Wave Blaster	$172
Sound Blaster 16 Basic Value	95
Sound Blaster 16 SCSI 2/with ASP	145/195
Sound Blaster 16 IDE/with ASP	95/159
Sound Blaster AWE 32	269

DIAMOND MULTIMEDIA KITS

- Quick Installation & Comprehensive User Guides
- Installation Disk (1.44 MB)
- Quick Start Video (VHS Tape)
- 16-Bit Stereo Sound Card w/CD-ROM Drive Interface
- Quad-Speed CD-ROM Drive
- MultiMedia Stereo Speakers
- Controller & Sound Cables

DIAMOND 4000 ENTERTAINMENT KIT

- Includes 11 Titles: Compton's Interactive Encyclopedia 1995, Star Trek 25th Anniversary, Out of this World, Battle Chess, The Lord of the Rings, Castles, Dragon Wars, Tass Times, Wasteland, Mindshadow, & Bard's Tale

$335

DIAMOND 6000 FINANCE & HOME OFFICE KIT

- **Includes 6 Titles:** Quicken for Windows Deluxe 4.0, Expresso Calendar, ViSio Home 3.0, Compton's Interactive Encyclopedia 1995, TripMaker, & Action 3.0

$379

NETWORKING PRODUCTS

SMC ELITE ULTRA ETHERNET

16 Bit 10BaseT or Coax	$109
16 Bit Combo	119
32 Bit EISA Combo	219

STACKABLE HUBS

12 port Hub	$599
Network management Hubs	419

TWISTED PAIR HUBS

10 BaseT w/12 RJ45	$599
10 BaseT w/8 RJ45	349

3Com

3C503 Etherlink II, 16bit 10BaseT/Coax	$169/174
3C509 Etherlink III, 10BaseT or Coax	119/539
3C509 Etherlink III, 16bit Combo	119
32bit EISA Etherlink III, 10BaseT or Coax	229
3C589 PCMCIA, 10BaseT or Combo	189/239

Megahertz

Linking Your Worlds

14.400 PCMCIA FAX MODEM INCLUDES X-JACK

- 14.4 BPS, V.42/V.42bis
- Auto Installation
- Hot Insertion
- Cellular Compatibility
- Includes XJACK, a retractable RJ11 connector that pops out to hook into a standard phone cord
- Fax Software Included

$189

HOURS: 9:30-6:00 Sat 10-5
5 Years Labor, 1 Year Parts Warranty on Evergreen Computers.
Prices subject to change w/o notice.
Not responsible for typos.
PRICES BASED ON CASH PRICES ONLY

(510)526-8667

FAX (510) 526-1447

EVERGREEN

Resources

Calendar Of Events

Conferences, Shows, Special Events

April

April 29 Computer Products Show And Sale. Oakland Coliseum. MarketPro. Call: (415)456-6730.

April 30 Computer Products Show And Sale. Scottish Rite Center, Sacramento. MarketPro. Call: (415)456-6730.

May

May 1–26 "Our Visual Future" Digital Fine Art Exhibition. San Francisco. Academy of Art College. Call: (415)274-2204.

May 1–3 Sixth Annual Rexx Symposium. Stanford. Rexx Language Association. Contact: Mary Crume, Rexx Symposium, SLAC MS 97, PO Box 4349, Palo Alto, CA 94309; email: *mjcrume@slac.stanford.edu*; fax: (415)926-3329.

May 1–5 DB/Expo And Conference. San Francisco. Blenheim. Call: 1-800-232-3976.

May 2–4 Desktop Video Conferencing Conference And Exhibition. San Francisco. DVC. Call: David Allen, (516)883-3382.

May 2–4 Networks Expo. San Francisco. Smith & Shows. Call: (201)346-1400.

May 3 How To Protect Your Privacy In Our Computer Age Presentation By Andre Bacard. San Jose. Computer Literacy Bookshops. Call: (408)435-1118 or email: *eventinfo_ca@clbooks.com* .

May 3 Live Internet Interview With Dee Ertukel, Senior Advisor To EMILY's List. On the WWW at *http://www.irsociety.com/roundtable.html* at 7 pm. Internet Roundtable Society. Email: *webchat@irsociety.com* or WWW: *http://IRsociety.com* .

May 4 Novell Open House. The Lakeside Atrium, Santa Clara. Novell. Call: 1-800-892-2922 ID#42148.

May 4 The Working Programmer's Guide To Serial Protocol Presentation By Tim Kientzle. San Jose. Computer Literacy Bookshops. Call: (408)435-1118 or email: *eventinfo_ca@clbooks.com* .

May 6 Robert Austin Computer Show. Oakland Convention Center. Robert Austin Corp. Call: 1-800-346-0100.

May 7 Computer, Ham Radio, Electronics Swap Meet. Las Positas College, Livermore. Livermore Amateur Radio Club. Call: (510)783-2803 days, 447-3857 eves.

May 7 Computer Products Show And Sale. Sonoma County Fairgrounds, Santa Rosa. MarketPro. Call: (415)456-6730.

May 7–11 1995 Conference On Human Factors In Computing Systems. Denver, CO. ACM. Call: (410)263-5382.

May 8 Design Patterns Presentation By Erich Gamma. San Jose. Computer Literacy Bookshops. Call: (408)435-1118 or email: *eventinfo_ca@clbooks.com* .

May 9 Customizing Web Pages With CGI Presentation By Mary Morris. San Jose. Computer Literacy Bookshops. Call: (408)435-1118 or email: *eventinfo_ca@clbooks.com* .

May 11 Video Demystified Presentation By Jan Ozer. San Jose. Computer Literacy Bookshops. Call: (408)435-1118 or email: *eventinfo_ca@clbooks.com* .

May 13 Computer Show And Sale Expo. Santa Clara County Fairgrounds, San Jose. Bonanza Show Productions. Call: Joe, (415)595-1053.

May 13–14 Computer Products Show And Sale. Cal Expo, Sacramento. MarketPro. Call: (415)456-6730.

May 16–17 Developing An Outsourcing Strategy Conference. Monterey. DCI. Call: (508)470-3880.

May 16–17 Wireless Datacomm Expo And Conference. San Jose. *Business Communications Review*. Call: 1-800-322-WDEC.

May 17–19 Government Technology Conference West. Sacramento. Smith & Shows. Call: Deborah Furlow, (916)363-5000 ext. 314.

May 18 Computer-Related Risks Presentation By Peter G. Neumann. San Jose. Computer Literacy Bookshops. Call: (408)435-1118 or email: *eventinfo_ca@clbooks.com* .

ETHEX

The Exploratorium's Ethical Scenarios Forum

ON THE INTERNET

ETHEX is a moderated online discussion of ethical, legal, and social issues in genetics developed by the Exploratorium in collaboration with the International Bioethics Institute. It is offered as a special interactive component of the exhibition Diving Into the Gene Pool, a major exhibition on DNA and the implications of the Human Genome Project, on view to the public until September 4. ETHEX allows subscribers to read real-life scenarios on subjects ranging from DNA fingerprinting in the courtroom to prenatal screening for genetic diseases; add their own viewpoint; see a poll of where others stand; or refer back to a discussion among professionals in the field, including ethicists, theologians, and medical and legal professionals. To subscribe to the ETHEX list send a request to listproc@exploratorium.edu with the subject line blank and the request subscribe ethex Your Name in the body of the message. For more info on Diving Into the Gene Pool call (415)353-0423.

MAY 4

Novell Open House

THE LAKESIDE ATRIUM, SANTA CLARA

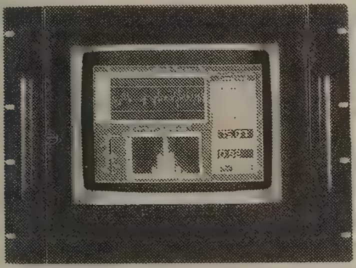
Everyone is invited to Novell's grand opening of the Santa Clara sales office located at The Lakeside Atrium, 2880 Lakeside Dr., #300, Santa Clara. The open house will run from noon to 7:00 pm and will feature presentations and discussions throughout the day covering a variety of topics such as NetWare 4.1, GroupWare, WordPerfect Application Software, and Education. This event-filled day is open to both end-users and resellers with information that appeals to every level of network user. Games, prizes, and food will be part of the fun. Admission is free. To register for the event, please call 1-800-892-2922 ID#42148.

RACK MOUNT
Computer Systems

APPRO International, Inc.
2032 Bering Drive
San Jose, CA 95131
(408) 452-9200
FAX (408) 452-9210

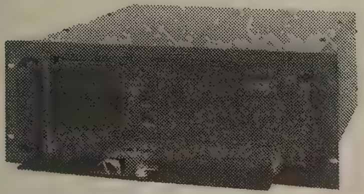
RACK MOUNT ANYONE? With so many look-alikes, whom do you choose? Choose a company which manufactures its own product lines backed by quality and experience! APPRO builds a complete line of rack mount products and custom-built systems up to 20 slots in ISA/EISA/VESA configurations. As a manufacturer, we guarantee our customers quick turnaround and provide superior service along with quality at unbeatable prices.

MONITORS



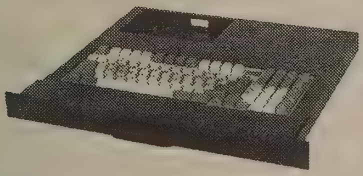
- 9" to 20" Diagonal Sizes
- Monochrome or Color SVGA Monitors
- Monitor Kit for Desktop Monitors Available

ENCLOSURES



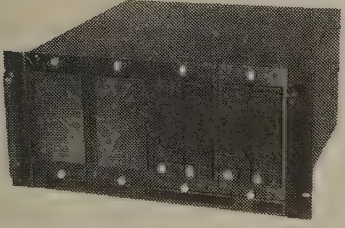
- 20 Different Models
- Designed for 8,12,14,20 Slot Board
- Up to 8 Drive Bay & 600W Power Supply
- Redundant Power Supply (Optional)

101 KEYBOARD



- Full travel drawer mounted 101 keyboard with mouse holder & 22" rail
- Heavy duty steel construction
- IBM PC T fully compatible

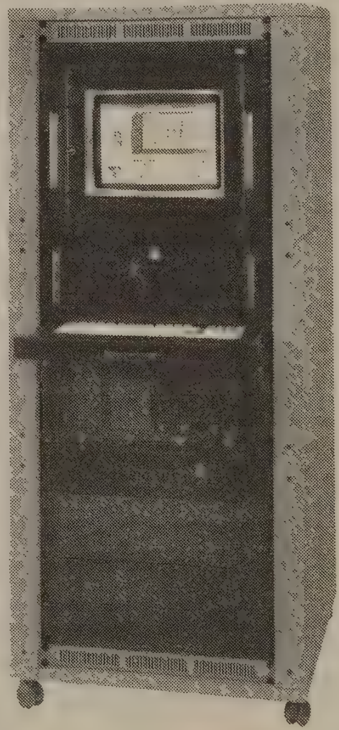
HARD DRIVE ENCLOSURES

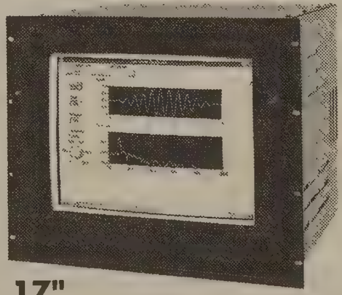


- Designed for 4 Full Height or 8 HH Drives
- Up to 600W Power Supply (2 x 300W PS)
- Redundant Power Supply (Optional)
- Removable HDD Bracket (Optional)

RACK MOUNT SERVER SYSTEM

Available as parts or complete system

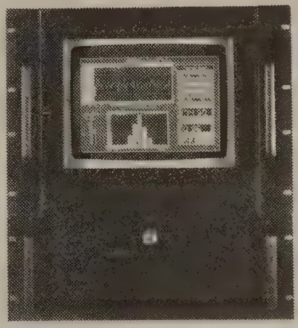




17" Monitor Enclosure

- 19" Rack mount chassis
- Adjusts to most 15" to 17" desktop monitors
- Lexan face plate

RACK MOUNT SYSTEMS

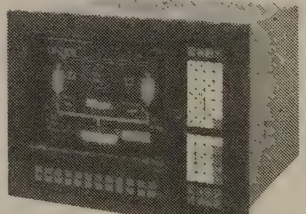


- 19" Rugged chassis with up to 600 watt P/S
- Motherboard or Backplane up to 20 slots
- 286, 386, 486, or Pentium systems
- Rackmount SVGA Monitor
- Fully Assembled with 48-hour burn-in

INDUSTRIAL RACK MOUNT SYSTEMS

- 286, 386, 486 ISA / EISA / VESA System
- 9" Monochrome or 10" Color SVGA Monitor
- 3 External and 2 Internal Drives
- Membrane 101 Keyboard

NEMA 4/12 INDUSTRIAL WORKSTATIONS

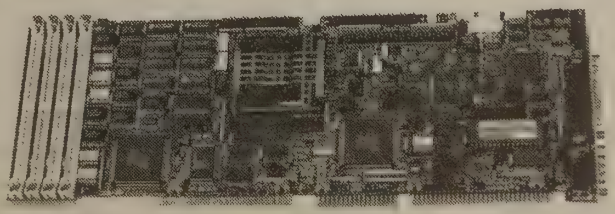


- 286, 386, 486, or Pentium systems
- Rack/Panel-mount chassis
- 9", 10", or 14" Mono or Color Monitor
- 7 or 8 Expansion slots

***CALL* for Custom Configurations!**

PENTIUM PCI CPU CARD

- Intel Pentium Processor
- Up to 128 MB on-board memory
- On-board PCI Local Bus SCSI-2 Controller
- IDE & Floppy Controllers
- 2 serial & 1 bi-directional parallel ports
- Also available 386, 486, ISA / EISA / VESA CPU cards



CALL
800-927-5464

VISA MasterCard American Express

- One year parts & labor warranty • No surcharge on Credit Card
- All returns require RMA number • All other returns subject to 15% restocking fee
- Not responsible for errors in typo

Calendar Of Events *continued...*

May 20 Computer Show And Sale Expo. San Mateo Expo Center. Bonanza Show Productions. Call: Joe, (415)595-1053.

May 21 Computer Products Show And Sale. Civic Auditorium, Stockton. MarketPro. Call: (415)456-6730.

May 21 Computer Products Show And Sale. Embassy Suites, San Rafael. MarketPro. Call: (415)456-6730.

May 21–24 Software Marketing Perspectives '95 Conference. San Francisco. *Software Marketing Journal.* Call: (415)989-8765.

May 22 Practical Programming In Tcl And Tk Presentation By Brent Welch. San Jose. Computer Literacy Bookshops. Call: (408)435-1118 or email: *eventinfo_ca@clbooks.com* .

May 22–25 SunWorld '95 Conference And Expo. San Francisco. Mitch Hall Associates. Call: (617)361-8000.

May 22–25 VR World '95 Conference And Expo. San Jose. *VR World* magazine and *CyberEdge Journal.* Call: 1-800-632-5537.

May 24 Live Internet Interview With Michael Tanner Of The CATO Institute On How To Really End Welfare As We Know It. On the WWW at *http://www.irsociety.com/roundtable.html* at 5:30 pm. Internet Roundtable Society. Email: *webchat@irsociety.com* or WWW: *http://IRsociety.com* .

May 24–26 International Trade Expo 1995. San Jose. CATE, Inc. Call: (415)903-2288.

May 24–27 International Computers Expo. Hong Kong. CATE Development, Inc. Call: (415)903-2288.

May 26–29 International Electronics, Computer, And Communication New Tech Expo '95. Guangzhou, China. CATE Development, Inc. Call: (415)903-2288.

May 27 Computer Products Show And Sale. Solano County Fairgrounds, Vallejo. MarketPro. Call: (415)456-6730.

May 27 Robert Austin Computer Show. Cow Palace, Daly City. Robert Austin Corp. Call: 1-800-346-0100.

May 28 Computer Products Show And Sale. Scottish Rite Center, Sacramento. MarketPro. Call: (415)456-6730.

May 28 Computer Show And Sale Expo. Alameda County Fairgrounds, Pleasanton. Bonanza Show Productions. Call: Joe, (415)595-1053.

June

June 1–4 VISCOMM West '95: The Visual Communications Expo And Conferences. San Francisco. United Digital Artists. Call: 1-800-243-3238.

June 3 Computer Products Show And Sale. Sonoma County Fairgrounds, Santa Rosa. MarketPro. Call: (415)456-6730.

June 4 Computer, Ham Radio, Electronics Swap Meet. Las Positas College, Livermore. Livermore Amateur Radio Club. Call: (510)783-2803 days, 447-3857 eves.

June 10 Robert Austin Computer Show. Oakland Convention Center. Robert Austin Corp. Call: 1-800-346-0100.

June 15–16 The Commercial Internet Conference. San Francisco. Institute for International Research. Call: 1-800-345-8016.

June 16–17 Writing For Interactive Multimedia Conference. Santa Clara. Writers Connection. Call: (408)445-3600, email: *Writerscxn@aol.com* .

June 17–19 1995 National Educational Computing Conference. Baltimore, MD. NECC '95. Call: (503)346-2834 or *NECC95@ccmail.uoregon.edu* .

June 19–21 NeXTStep Expo. San Francisco. Smith & Shows. Call: (508)470-3870.

June 22–24 ArtTeco II United Media Developers Festival. San Francisco. *Morph's Outpost on the Digital Frontier* magazine. Call: (510)704-7178.

June 24 Robert Austin Computer Show. Cow Palace, Daly City. Robert Austin Corp. Call: 1-800-346-0100.

Classes, Seminars, Workshops

May

May 1 Complete Online Novell CNA Training. Berkeley. Cyber State University. Call: (510)253-TREK.

May 1 Intro To MS-DOS 5.0/6.2 Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

May 1 Media Composer Editing Tips And Techniques Class. San Francisco. Bay Area Video Coalition. Call: (415)861-3282.

May 1 Overview Of Data Networking Class. Pleasanton. AT&T Technical Education Center. Call: Adrian Kendrick, (510)224-3929.

May 1 The Electric Word: The Internet For The Literary Community Class. San Francisco. UC Berkeley Extension. Call: (510)643-6904.

May 1–2 Intro To Microsoft Windows For New Users Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

May 1–2 MicroStation: Basic 2D Graphics Update Training Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

May 1–2 Novell System Supervisor 3.12 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

May 2 Internet Overview Class. Pleasanton. AT&T Technical Education Center. Call: Adrian Kendrick, (510)224-3929.

May 2 Intro To DOS Class. Walnut Creek. Computer Education Center. Call: (510)937-2566.

May 2 Intro To Internet Business Solutions Class. Palo Alto. Internet Business Solutions. Call: Kristina Schillberg, (415)617-3722.

May 2 Paradox 4.5/5.0 For DOS/Win Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

May 2 Repetitive Strain/Carpal Tunnel Injury Free Workshop. Santa Clara. Dr. Michael Currie. Call: (408)249-3000.

May 2–3 Media Composer: Advanced Effects Class. San Francisco. Bay Area Video Coalition. Call: (415)861-3282.

May 3 FoxPro 2.6 For DOS/Win/Mac Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

May 3 Hands-On The Global Internet Class. Pleasanton. AT&T Technical Education Center. Call: Adrian Kendrick, (510)224-3929.

May 3 IBM PC Clone Hands-On Hardware Class. Oakland. Excel Micro Solutions. Call: (510)836-2040.

May 3 Intro To Windows Class. Walnut Creek. Computer Education Center. Call: (510)937-2566.

May 4 Doing Business On The Internet Seminar. Palo Alto. Computer College Silicon Valley. Call: (415)325-DO-IT.

May 4 Intro To Windows 3.1 Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

May 4 Multimedia Studies Program Free Information Session. San Francisco. SFSU Extended Education. Call: (415)904-7700.

May 4–5 Fundamentals Of AutoCAD/PC Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

May 4–6 Fundamentals Of AutoCAD Class. Sausalito. The ACADemy. Call: (415)331-9466.

May 4–8 Banyan Vines Administration Class. Oakland. California Computer Options. Call: (510)444-5700 ext. 188.

May 5 Excel 5.0 Win/Mac Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

MEGA TEK

1642 Centre Pointe Dr., Milpitas, CA 95035
Tel: (408) 262-9898 * Fax: (408) 262-4189

Bus Hrs:	
Mon-Fri:	9:30 -6:00
Sat:	11:30-4:00

BEST BUY SYSTEM MULTIMEDIA

- * MotherBoard w/ Intel CPU
- * 4MB High Speed RAM
- * 1.44 Teac Floopy Drive
- * 420 MB Fast IDE HD
- * SVGA VLB w/ 1MB
- * 14" SVGA .28 Color Monitor
- * Mini Tower Case w/230W P.S.
- * Mitsumi keyboard
- * Microsoft Compatible Mouse + Pad
- * Panasonic Double Speed CD-ROM
- * Sound Blaster Pro 16 + Speakers

Intel PENTIUM-90/256K PCI	**1,669**
PENTIUM-66/256K PCI	**1,507**
PENTIUM-60/256K PCI	**1,415**
Genoa 486DX4-100/256K VLB	**1,197**
Genoa 486DX2-66/256K VLB	**1,132**
486DX2-66/256K VLB	**1,112**
486DX-50/256K VLB	**1,139**
486DX-40/256K VLB (AMD)	**1,072**
486DX-33/256 VLB	**1,052**

MEGA SALE (Intel CPU)

MEGA SALE (Intel CPU)	MB	MB+CPU
Intel PENTIUM-90/256K PCI	300	830
PENTIUM-66/256K PCI	165	415
PENTIUM-60/256K PCI	165	380
Genoa 486DX4-100/256K VLB	130	355
Genoa 486DX2-66/256K VLB	109	240
Genoa 486DX-50/256K VLB	109	320
Genoa 486DX-33/256K VLB	109	209
486DX4-100/256K PCI w/IDE I/O	130	375
486DX2-66/256K PCI w/IDE I/O	130	270
486DX-50/256K PCI w/IDE I/O	130	345
486DX-33/256K PCI w/IDE I/O	130	220
486DX2-66/256K VLB	85	230
486DX-50/256K VLB	85	285
486DX-33/256K VLB	85	180

MEGA SYSTEM

- * MotherBoard w/256K Cache + Intel CPU
- * 4MB High Speed RAM
- * 1.44 Teac Floopy Drive
- * 420 MB Fast IDE HD
- * 512 K Trident SVGA
- * 14" SVGA .28 Color Monitor
- * Mini Tower Case w/230W P.S.
- * 101 keyboard
- * Microsoft Compatible Mouse w/ Pad

Intel PENTIUM-90/256K PCI	**1427**
PENTIUM-66/256K PCI	**1265**
PENTIUM-60/256K PCI	**1173**
Genoa 486DX4-100/256K VLB	**955**
Genoa 486DX2-66/256K VLB	**880**
Genoa 486DX-50/256K VLB	**945**
Genoa 486DX-33/256 VLB	**855**
486DX2-66/256K VLB	**870**
486DX-50/256K VLB	**897**
486DX-40/256K VLB (AMD CPU)	**830**
486DX-33/256 VLB	**810**

UPGRADE	ADD	UPGRADE	ADD
540 MB	20	SVGA VLB w/1M	35
1 GB IDE	180	Mid Tower Case	25
CPU Cooling Fan	5	Full Tower Case	40
Non-in Monitor	10	Microsoft Mouse	15
15" Monitor	100	Logitech Mouse	10
Trident 1MB	20	IDE VLB w/I/O	10

Intel 486 DX 33 CPU
w/ MotherBoard ISA
only $115

72 PINS MEMORY

512x36-80/70 2MB	70/75
1x36-80/70 4MB	133/136
2x36-80/70 8MB	260/270
4x36-80/70 16MB	510/540

30 PINS MEMORY

1x9-80/70 1MB	31/33
4x9-80/70 4MB	115/125

MONITOR

Super VGA 14" .28	**205**

HARD DRIVERS

MAXTOR 345 MB IDE	155
MAXTOR 540 MB IDE	185
CONNER 340 MB IDE	160
CONNER 420 MB IDE	170
CONNER 540 MB IDE	185
CONNER 1.2GB IDE	385
QUANTUM 540 MB SCSI	225
FUJITSU 525 MB	185
WESTERN DIGITAL 540 MB IDE	210
WESTERN DIGITAL 1.0 GB IDE	420

KEYBOARDS

Mitsumi keyboard	12
Keytronic	24
Focus 2001	35

VGA

SVGA 256K/512K/1M	$24/35/57
SVGA Vesa Local Bus w/ 1MB/2MB	75/124
ATI	
WinBoost PCI 2MB (Mach 64) DRAM	178
Mach 32 PCI 1MB/2MB DRAM	140/190
SPIDER	
32 VLB 1MB/2MB	81/129
256 CACHE 1MB/2MB	115/165
64 VLB/PCI 1MB/2MB	119/174
BlackWidow Plus VLB/PCI	160/215
Tarantula 64 2MB/4MB	265/375

CONTROLLERS

IDE 2FD/2HD w/2S/1P/1G	11
IDE VLB w/I/O -- I/O w/16550 chip	18/25
IDE I/O w/16550	32
IDE VLB I/O w/16550	38
IDE PCI controller	26
SCSI PCI controller	65
SCSI PCI w/Wide SCSI	99
Adaptec SCSI 1522/1542	79/168
Adaptec SCSI 2842 VLB	209
Adaptec 2940K PCI/2940W PCI (Wide SCSI)	197/265
Promise DC-4030 VLB IDE Cache	115
Spider Pro 32 VLB IDE w/I/O+SVGA	93

TERMS AND CONDITIONS

1- One year parts & 3 years labor on all complete system.
2- Not responsible for type errors.
3- Price and availability subject to change w/o notice.
4- 15% Restocking fee on returns
5- Sale prices are for end users purchase only.
6- All special-ordered items are non-refundable.
7- Shipping, Insurance and COD charges are extra and non-refundable.

MULTIMEDIA

SoundBlaster Pro 16 / 16 MCD	75/79
Sound Blaster 16 SCSI II	110
SONY CD-ROM /IDE Double Speed	115
PANASONIC CD-ROM Double Speed	114
NEC Triple Speed	275
TEAC 4X SPEED	180
TOSHIBA 4X SPEED w/Card	210
*DIGITAL SCHOOLHOUSE KIT	268
*IMPRESSION CD-ROM KIT Double speed CD-ROM + Sound Blaster 16 + Speakers + a lot CD titles.	255
*POWER KIT III Panasonic Double Speed CD-ROM +Sound Blaster 16+Speakers+11 CD titles	245

MISCELLANEOUS

Fax/Modem 96/24	29
Fax/Modem 14400	50
Fax/Modem 28800	115
US ROBOTICS Fax/Modem 14400	99
US ROBOTICS Fax/Modem 28800 v.34	230
COLORADO Tape Backup DJ-20 250 MB	150
Mini Tower Case w/ 230 Watt P.S	34
Desktop AT case w/230 Watt P.S	40
Medium Tower Case w/ 230 Watt P.S	58
Full Tower Case w/ 250 Watt P.S	74
Microsoft Mouse Serial	25
Logitech Mouse Serial	20
1.44 Floppy Drive	32
1.2 Floppy Drive	40
TEAC 1.2/1.44 Combo Drive	99
80 Watt Speakers	50
120 Watt Speakers	65

Calendar Of Events *continued...*

May 5 Software Quality And The Law Class. San Francisco. UC Berkeley Extension. Call: (510)643-6904.

May 6 Basic Lotus Notes Class. San Francisco. UC Berkeley Extension. Call: (510)643-6904.

May 6 Intro To Virtual Reality Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

May 6 Topics In UNIX System V Release 4 Class. Atherton. UC Berkeley Extension. Call: (510)642-4151.

May 6–7 & 13 The Art Of Interactive Design Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

May 7 Connecting Your PC To The Internet Seminar. San Francisco. Internet Literacy Consultants. Call: (415)469-8271.

May 8 Basic Telecommunication Principles And Network Engineering Class. Pleasanton. AT&T Technical Education Center. Call: Adrian Kendrick, (510)224-3929.

May 8 Complete Online Novell CNE Training. Berkeley. Cyber State University. Call: (510)253-TREK.

BONANZA SHOW PRODUCTIONS PRESENTS THE

COMPUTER SHOW AND SALE EXPO

SAN MATEO will feature some MACINTOSH Hardware & Software!

SANTA CLARA COUNTY FAIRGROUNDS
Saturday, May 13
344 TULLY ROAD, SAN JOSE
Take Highway 101 to San Jose. Exit on to Tully Road West.

SAN MATEO EXPO CENTER
Saturday, May 20
2495 SOUTH DELAWARE, SAN MATEO
Take 101 to 92 West. Take the Delaware exit and follow the signs.

ALAMEDA COUNTY FAIRGROUNDS
* Sunday, May 28
4501 PLEASANTON AVENUE, PLEASANTON
From the 580 take 680 South and exit Bernal Avenue Use Gate 8.

SHOW HOURS 10AM - 4PM

$1.00 OFF WITH THIS AD!
REGULAR ADMISSION $5.00.
FREE WITH BONANZA SHOW MEMBERSHIP

CHILDREN 12 & UNDER FREE COPIES ACCEPTED
ONE DISCOUNT COUPON PER PERSON MT MAY 1995
For info call: 1.415.595.1053

May 8 Lotus 1-2-3 4.0 For DOS/Win Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

May 8 Quattro Pro 5.0/6.0 For DOS/Win Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

May 8 The Internet: AIDS And HIV+ Resources And Support Class. San Francisco. UC Berkeley Extension. Call: (510)643-6904.

May 8 UNIX Fundamentals For Users Class. Pleasanton. AT&T Technical Education Center. Call: Adrian Kendrick, (510)224-3929.

May 8–9 Fundamentals Of Telecommunications Seminar. San Jose. Data-Tech Institute. Call: (201)478-5400.

May 9 WordPerfect 6.0 For DOS Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

May 9–12 Elementary AutoCAD Class. Sausalito. The ACADemy. Call: (415)331-9466.

May 9–12 Intro To AutoCAD Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

May 9–12 Novell 4.x System Manager Class. Oakland. California Computer Options. Call: (510)444-5700 ext. 188.

May 10 MS Office 4.2 Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

May 10–12 Avid: Intro To Media Composer Class. San Francisco. Bay Area Video Coalition. Call: (415)861-3282.

May 11 Access 2.0 Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

May 11 Excel 5.0 Win/Mac Charts Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

May 11 Internet Business Solutions Roundtable Seminar. Palo Alto. Internet Business Solutions. Call: Kristina Schillberg, (415)617-3722.

May 11 Internet For Artists Class. San Francisco. The Learning Annex. Call: (415)788-5500.

May 11 MAS 90 Accounting Software Training Class For Intermediates. San Francisco. Lindquist & Lukrich Consulting. Call: (415)905-6900.

May 11–12 Building A Market Focused Service Strategy Seminar. Santa Clara. Information Technology Services Marketing Association. Call: 1-800-404-8762.

May 11–12 Supporting And Troubleshooting Windows 3.1 Seminar. San Jose. Data-Tech Institute. Call: (201)478-5400.

May 13 CNE Hands-On Study Group With Remote Access. Oakland. Excel Micro Solutions. Call: (510)836-2040.

May 13 Emerging Technologies In Telecom Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

May 13 Web Publishing Workshop. Palo Alto. Internet Business Solutions. Call: Kristina Schillberg, (415)617-3722.

May 13–14 Adobe After Effects: Digital Effects And Layering On The Desktop Class. San Francisco. Bay Area Video Coalition. Call: (415)861-3282.

May 15 Complete Online Novell CNA Training. Berkeley. Cyber State University. Call: (510)253-TREK.

May 15 Intro To IRIX Class. Mountain View. Silicon Graphics. Call: 1-800-800-4SGI.

May 15 Onyx Maintenance Class. Mountain View. Silicon Graphics. Call: 1-800-800-4SGI.

May 15 Programming In C Language Class. Pleasanton. AT&T Technical Education Center. Call: Adrian Kendrick, (510)224-3929.

May 15–16 Advanced Troubleshooting For The Macintosh Seminar. San Francisco. Data-Tech Institute. Call: (201)478-5400.

May 15–16 Exploring The Information Highway Seminar. San Francisco. Data-Tech Institute. Call: (201)478-5400.

May 15–16 ISO 9000 Lead Assessor Training/*QS Overview Seminar. San Jose. Perry Johnson, Inc. Call: Tom Parker, 1-800-479-2020.

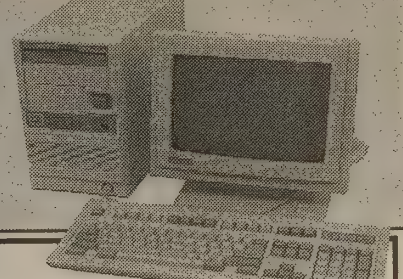
May 16 Repetitive Strain/Carpal Tunnel Injury Free Workshop. Santa Clara. Dr. Michael Currie. Call: (408)249-3000.

May 16–17 Accessing The Internet Seminar. San Jose. Data-Tech Institute. Call: (201)478-5400.

TEAC
4X CD-ROM
$189

ComTEK Computer

5 YEARS LABOR & 1 YEAR PARTS WARRANTY ON ALL COMPUTERS



MULTIMEDIA 486DX 33/66 W/256K CACHE VL BUS

- 486DX 33/66 w/256K Cache VL Bus
- 4MB RAM
- 420MB IDE Hard Disk
- SVGA Card w/1MB, VL Bus
- SVGA .28 NI Monitor
- 1.2 & 1.44 Floppy Drives
- Mini Tower Case
- 101 Key Keyboard
- 2S, 1P, 1G Ports
- Dual Speed CD-ROM
- 16 Bit Sound Card
- Pair of Speakers
- Mouse & Mouse Pad

DX33 $1149

DX66 $1199

486 VL BUS SYSTEMS

- 486DX Motherboard w/256K Cache
- 4MB RAM
- IDE VL Bus with I/O
- 420MB Hard Disk
- 14" NI SVGA Monitor .28dp
- SVGA Video Card w/1MB, VL Bus
- 1.2 & 1.44 Floppy Drives
- Mini Tower Case
- 101 Key Keyboard
- Mouse

DX33...Sale! $929
DX40..........$979
DX2-66.....$1029
DX2-80.....$1079

486 PCI SYSTEMS

- 486DX Motherboard
- 8MB RAM
- PCI IDE Controller
- 540MB Hard Disk
- 15" NI SVGA Monitor .28dp
- SVGA Video Card w/1MB, PCI
- 1.2 & 1.44 Floppy Drives
- Medium Tower Case
- 101 Key Keyboard
- Mouse

DX2-66.....$1499
DX2-80.....$1539

PENTIUM LOCAL BUS SYSTEMS

- Pentium Motherboard w/256K Cache
- 8MB RAM
- IDE VL Bus with I/O
- 540MB Hard Disk
- 15" NI SVGA Monitor .28dp
- SVGA Video Card w/1MB, VL Bus
- 1.2 & 1.44 Floppy Drives
- Medium Tower Case
- 101 Key Keyboard
- Mouse

60MHz......$1629
66MHz......$1649

PENTIUM PCI SYSTEMS

- Pentium Motherboard w/256K Cache
- 16MB RAM
- PCI IDE Controller
- 1GB Hard Disk
- 15" NI SVGA Monitor .28dp
- SVGA Video Card w/1MB, PCI
- 1.2 & 1.44 Floppy Drives
- Medium Tower Case
- 101 Key Keyboard
- Mouse

60MHz......$2579
66MHz......$2649
90MHz......$2829

MULTIMEDIA KITS

- Sound Blaster
- CD ROM Dual Speed
- Speakers
- Microphone
- CD Titles

$269

- Sound Blaster 16 MCD
- 2X CD ROM
- Panasonic

$199

Turtle Beach Monte Carlo

- Stereo 16-Bit Wave Audio
- 50 trial games, 15-full working versions
- Includes V-Synth wavetable software, Stratos™ MIDI software, & Wave SE™ sound editing software
- CD-ROM Interface

$89

MOTHERBOARDS

486DX2/66 PCI	$309
486DX2/80 PCI	379
486DX2/66 VL Bus	249
486DX2/80 VL Bus	279
486DX33 VL Bus	199
Pentium 60 PCI	589
Pentium 66 PCI	649
Pentium 90 PCI	869

MONITORS

SVGA (1024x768) .28	$220
SVGA (1024x768) .28 Non-Int	230
SVGA Viewsonic 4E	270
SVGA Viewsonic 6E Non-Int	285
SVGA Viewsonic 15 Non-Int	399
SVGA Viewsonic 17 Non-Int	899
MAG 15F/17F	389/849
NEC 3FG/4FG	549/629
SVGA 15/17" Impression	327/694

- 100% Financing with 90 Day Free Interest
- Accept Visa and Mastercard
- Price Subject to Change without Notice
- Dealer Inquiries Welcome
- Not Responsible for Typographical Errors
- Prices based on Cash Prices

VIDEO CARDS

Cirrus Logic VLB w/1MB	$79
Trident VLB w/1MB	75
Genoa VLB w/1MB	99
Genoa 64 PCI w/2MB	219
Stealth 64 PCI w/2MB	239
Viper SE PCI w/2MB	299

CASES

Mini Tower	$42
Medium Tower	70
Baby AT	65
Full Tower	99

MODEMS & FAXES

Zol 2400 Baud	$39
Zol 96/24 Modem & Fax w/Win	55
Zoltrix 14.4 Modem & Fax	79
VoiceMail 14.4 Fax	119

HARD DRIVES

CONNER		
CP30254	250MB IDE	$159
CP30420	420MB IDE	179
CP3540	540MB SCSI	229
	1GB SCSI	470
MAXTOR		
7345A	345MB IDE	$179
MXT540A	540MB IDE Fast	199
MXT540S	540MB SCSI Fast	CALL

KEYBOARDS

Chicony	$17
Keytronic USA	33
Maxi Switch	33
Omnikey 102/Ultra	89/99
Focus w/Cal	35

CONTROLLERS

IDE w/IO	$18
IDE VL Bus	29
Adaptec VL Bus SCSI	239
Adaptec PCI SCSI	279

MULTIMEDIA & CD-ROM

Sound Blaster 16 MCD	$89
Sony Dual Speed	119
Panasonic Dual Speed	149
Toshiba 3401B	249
Discovery Kit	269
Others	CALL

MOUSES

Microsoft Compatible	$13
Microsoft Serial	39
Microsoft Bus	69
Logitech MouseMan	59

SIMMS & MATH

1MB SIMM	$37
4MB SIMM	145
512KBx36 SIMM (72 pins)	CALL
1MBx36 SIMM (72 Pins)	145
4MBx36 SIMM (72 Pins)	485
Other	CALL

CALL FOR OTHER ITEMS
NOT LISTED

VISA MasterCard

DUBLIN

6602 Dublin Blvd., Dublin, CA 94568
(510) 803-1530

SANTA CLARA

5029 Stevens Creek Blvd., Santa Clara, CA 95051
(408) 249-4297

Calendar Of Events *continued...*

May 16–17 PC Repair Hands-On Class. Oakland. Excel Micro Solutions. Call: (510)836-2040.

May 16–17 Understanding TCP/IP Seminar. Sacramento. Data-Tech Institute. Call: (201)478-5400.

May 16–19 Intermediate AutoCAD Class. Sausalito. The ACADemy. Call: (415)331-9466.

May 16–30 Electric Image 1: Animation/Geometry Class. San Francisco. Center for Electronic Art. Call: (415)956-6500.

May 17 Excel For Beginners Class. San Francisco. Lindquist & Lukrich Consulting. Call: (415)905-6900.

May 17 Learn To Use The Internet For Fun And Profit Class. San Francisco. The Learning Annex. Call: (415)788-5500.

May 17 Word 6.0 Win/Mac Level 2 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

May 17 Word 6.0 Win/Mac Upgrade Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

May 18 MAS 90 Accounting Software Report Writer Training Class. San Francisco. Lindquist & Lukrich Consulting. Call: (415)905-6900.

May 18 MAS 90 Accounting Software Training Class For Beginners. San Francisco. Lindquist & Lukrich Consulting. Call: (415)905-6900.

May 18–19 The Help Desk Analyst's Workshop. San Jose. Data-Tech Institute. Call: (201)478-5400.

May 18–19 Troubleshooting And Fine-Tuning The Networked PC Seminar. San Jose. Data-Tech Institute. Call: (201)478-5400.

May 19 Excel 5.0 Win/Mac Level 3 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

May 19 HP Laser Printer Repair Hands-On Class. Oakland. Excel Micro Solutions. Call: (510)836-2040.

May 19 WordPerfect 6.0 For Windows Level 2 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

May 19–20 Intro To Excel 5.0 Class. Fremont. Mission Valley Regional Occupational Program. Call: (510)657-1865.

May 19–20 Intro To PowerPoint Class. Fremont. Mission Valley Regional Occupational Program. Call: (510)657-1865.

May 19–20 ISO 9000 For Technical Publications Class. Santa Clara. UCSC Extension. Call: (408)748-2950.

May 20 Computer Ergonomics: Save Yourself Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

May 20 Electronic Digital Imaging: An Intensive, Hands-On Workshop For Photographers. San Francisco. UC Berkeley Extension. Call: (415)252-5249.

May 20–21 Digital Editing With QuickTime Class. San Francisco. Bay Area Video Coalition. Call: (415)861-3282.

May 22 C Language Structure And Pointer Class. Pleasanton. AT&T Technical Education Center. Call: Adrian Kendrick, (510)224-3929.

May 22 Complete Online Novell CNE Training. Berkeley. Cyber State University. Call: (510)253-TREK.

May 22 Data Communication II Class. Pleasanton. AT&T Technical Education Center. Call: Adrian Kendrick, (510)224-3929.

May 22 OSF Motif Programming Class. Mountain View. Silicon Graphics. Call: 1-800-800-4SGI.

May 22–23 Data Communications And Networking Seminar. San Francisco. Center for Advanced Professional Development. Call: (714)261-0240.

May 22–23 Networking The Macintosh Seminar. San Jose. Data-Tech Institute. Call: (201)478-5400.

May 22–24 Avid: Intro To Media Composer Class. San Francisco. Bay Area Video Coalition. Call: (415)861-3282.

May 23 Image And Communication Skills For Women Workshop. San Mateo. National Businesswomen's Leadership Assoc. Call: 1-800-258-7246.

May 23 Internet For Writers Class. San Francisco. The Learning Annex. Call: (415)788-5500.

May 23–24 Network Fundamentals Hands-On Class. Oakland. Excel Micro Solutions. Call: (510)836-2040.

May 23–25 AutoCAD Designer Class. Sausalito. The ACADemy. Call: (415)331-9466.

May 24 A Career In Multimedia Class. San Francisco. Bay Area Video Coalition. Call: (415)861-3282.

May 24 Image And Communication Skills For Women Workshop. San Jose. National Businesswomen's Leadership Assoc. Call: 1-800-258-7246.

May 24 PowerPoint 4.0 Win/Mac Level 2 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

May 24–25 NetWare Basic Training Seminar. San Francisco. Center for Advanced Professional Development. Call: (714)261-0240.

May 24–26 Novell 3.12 System Manager Class. Oakland. California Computer Options. Call: (510)444-5700 ext. 188.

May 25 Image And Communication Skills For Women Workshop. Concord. National Businesswomen's Leadership Assoc. Call: 1-800-258-7246.

May 25 Internet Business Solutions Roundtable Seminar. Palo Alto. Internet Business Solutions. Call: Kristina Schillberg, (415)617-3722.

May 25–26 Communications And Modem Troubleshooting Hands-On Class. Oakland. Excel Micro Solutions. Call: (510)836-2040.

May 26 Image And Communication Skills For Women Workshop. San Francisco. National Businesswomen's Leadership Assoc. Call: 1-800-258-7246.

May 27 Web Publishing Workshop. Palo Alto. Internet Business Solutions. Call: Kristina Schillberg, (415)617-3722.

May 29 Complete Online Novell CNA Training. Berkeley. Cyber State University. Call: (510)253-TREK.

May 29 Image Vision Library Class. Mountain View. Silicon Graphics. Call: 1-800-800-4SGI.

May 30–July 25 Writing For Multimedia: New Horizons For Writers Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

May 31 Image And Communication Skills For Women Workshop. Sunnyvale. National Businesswomen's Leadership Assoc. Call: 1-800-258-7246.

May 31 Intro To Premiere Class. San Francisco. Bay Area Video Coalition. Call: (415)861-3282.

May 31 Windows Optimization And Support Class. Oakland. California Computer Options. Call: (510)444-5700 ext. 188.

May 31–June 1 AutoCAD Release 13 Update Training Class. Sausalito. The ACADemy. Call: (415)331-9466.

May 31–July 19 From Wagner To Virtual Reality: History Of Multimedia Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

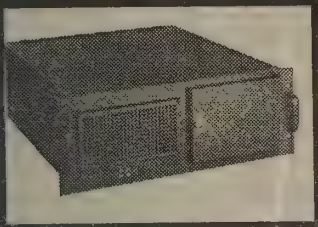
May 31–July 19 Intro To Interactive Multimedia Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

June

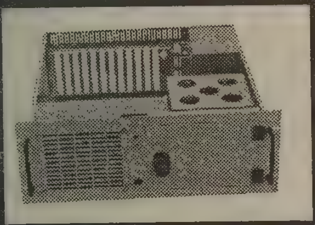
June 1 Image And Communication Skills For Women Workshop. Concord. National Businesswomen's Leadership Assoc. Call: 1-800-258-7246.

June 1 Intro To Windows 3.1 Level 1 Class.

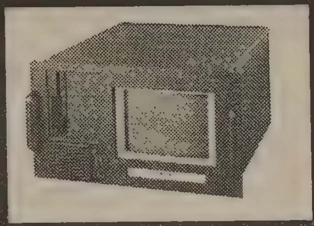
19" RACKMOUNT ENCLOSURE



MADE IN U.S.A.

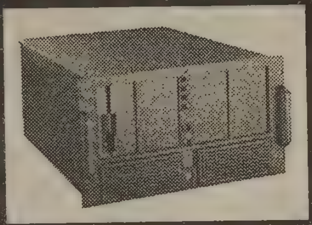


19" RACKMOUNT W/MONITOR



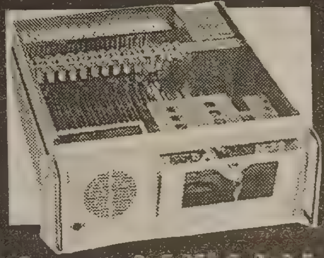
- 19" Rackmounting
- Integral Monitor
- 10" .28 dot pitch SVGA Color
- 9" Mono-TTL or VGA
- 8 or 14 Slot Passive Backplane
- 8 Slot Motherboard Mounting
- U.S.A. Manufactured

19" RACKMOUNT ENCLOSURE



- 8, 14 & 20 Slot Options
- Dual Power Supplies
- Power Supply Redundancy Option
- 8 Drive Bays
- 8 Fans
- Motherboard or Passive Backplane
- 200-1000 Watt Power Supply
- USA Manufactured

19" RACKMOUNT STEEL INDUSTRIAL CHASSIS



- Supports 2x5.25" & 3x3.5 1/2 Ht. HDD's
- Vibration Damper
- 250W Power Supply
- Safety Approved For TUV/FCC/UL/CSA EMI Req: FTZ & FCC
- Cooling Fan

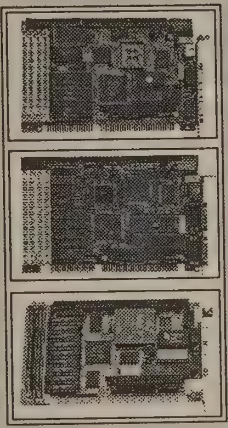
Call us with your specifications

HALF-SIZE CPU CARDS

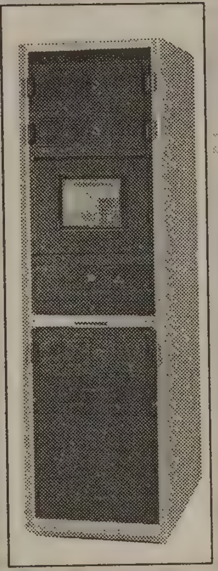
PC/AT 386SX/486SLC
1/2 Size All-In-One SBC
CPU
Cx486SLC-33 MHz or 80386SX-40 MHz
Memory
512KB-16MB DRAM
•Supports EPROM/FLASH disk, Up to 1.44 MB

PC/AT386DX
1/2 Size All-In One SBC
CPU
AMD 80386DX-40 On Board
Cache
128K Cache On Board
Memory
1-64MB DRAM
•8 Layers With Double Sided SMT PCB

PC/AT 486DX
1/2 Size All-In-One SBC
CPU
Cyrix Cx486 or 80486SX/DX/DX2, Clock Rate from 25MHz to 66MHz
Cache
Up to 256KB
Memory
1-64MB DRAM



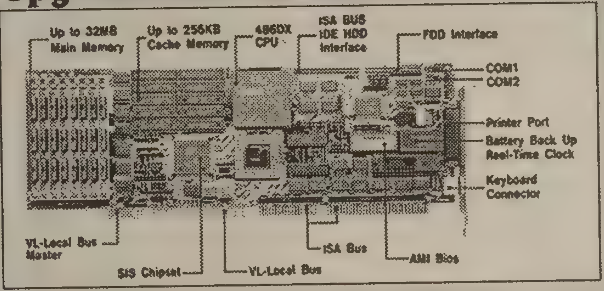
CENTRALIZED LAN SYSTEM



Features:

- FILE SERVER
- MULTI-COMMUNICATION SYSTEM
- MULTI-FUNCTIONAL SYSTEM
- 24 DIFFERENT SYSTEMS CAPABILITY RUNNING AT SAME TIME
- CAPABLE OF CUSTOMIZED SPECIFICATIONS

Upgradable to 100MHz CPU CARD



- 4 Upgradable Models using Intel CPU's
  - -80386DX-33/40 MHz
  - -80486DX-33 MHz
  - -80486DX2-25/50 & 33/66 MHz
  - -80486DX4-100MHz
- 80386 & 80486 Upgradable Processor with AMI BIOS
- 256K Write Back Cache Memory
- Up to 32 MB of 70ns SIMM DRAM
- IDE Hard Disk & Floppy Disk Controller
- 2 Serial/1 Parallel Ports
- 80387 Co-Processor, 80486DX Internal Co-Processor
- Watch Dog Timer Can Be Set 500ms or 1sec, time out
- Programmable shadow RAM Capacity
- 6-Layer PCB Design To Meet Factory Floor Requirements

CALL FOR PRICING

EISA CPU CARD AVAILABLE

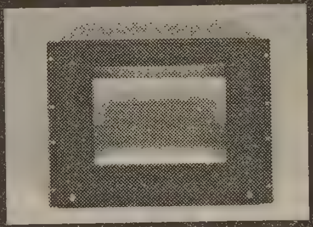
PASSIVE BACKPLANE BOARD

6 SLOT	$53
8 SLOT 6 AT & 2 XT	$35
8 SLOT	$59
12 SLOT	$90
14 SLOT	$94
18 SLOT	$180
20 SLOT	$194

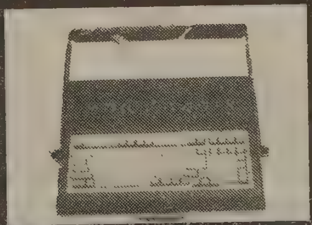
EISA PASSIVE BACKPLANE BOARD AVAILABLE

SPECIAL OPTION
- 14 SLOT SEGMENTED $41
- 18 SLOT SEGMENTED $445
- 20 SLOT SEGMENTED $553

19" RACKMOUNT MONITOR KIT



19" RACKMOUNT KEYBOARD



14" SVGA COLOR MONITOR

- CRT 14" DIAGONAL NON-GLARE FLAT
- DOT .28mm
- RES. 1024 X 768 NON-INTERLACE, 800 X 600, 720 X 400 640 X 480, 640 X 350
- POWER SUPPLY 120-240V AUTO SELECTION

9" SVGA Mono Paper White

9" SVGA MONITOR MONO PAPER WHITE

- CRT: 9" x 90 DEFLECTION NON-GLARE PAPER WHITE
- RES. 1024x768, 720x400, 640x480
- POWER SUPPLY 100-240V

Multi-Micro systems

TEL: (408)-437-1555
(800)-875-0333
FAX: (408) 437-1583

- CORPORATE PO's WELCOME
- RESELLER/VAR INQUIRIES WELCOME

Terms & Conditions
Prices subject to change without notice. Not responsible for typos or errors. Prices based on cash. Please ask about products not listed in this advertisement.
1 year warranty on parts.

MasterCard VISA

2124 Zanker Road • San Jose, CA 95131 • Mon-Fri: 9am-6pm

Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

June 1–2 Project 4.0 Win/3.0 Mac Level 1 & 2 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

June 1–2 Understanding Document Imaging Seminar. San Francisco. Data-Tech Institute. Call: (201)478-5400.

June 1–22 Multimedia And The Internet Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

June 1–22 Survey Of Interactive Advertising Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

June 1–August 3 Graphics And Human Interface For Multimedia On The PC Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

June 2 IBM PC Clone Hands-On Hardware Class. Oakland. Excel Micro Solutions. Call: (510)836-2040.

June 2 Image And Communication Skills For Women Workshop. Sacramento. National Businesswomen's Leadership Assoc. Call: 1-800-258-7246.

June 2 Intro To MS-DOS 5.0/6.2 Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

June 2–3 Intro To PowerPoint Class. Fremont. Mission Valley Regional Occupational Program. Call: (510)657-1865.

June 3 Computer Ergonomics: Save Yourself Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

June 3 Overview Of Multimedia Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

June 3 Photoshop: An Intro For Mediamakers Class. San Francisco. Bay Area Video Coalition. Call: (415)861-3282.

June 5 AT&T UNIX System V Release 4 Administration Class. Pleasanton. AT&T Technical Education Center. Call: Adrian Kendrick, (510)224-3929.

June 5 Macintosh Basics For Multimedia I Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

June 5–6 PC Repair Hands-On Class. Oakland. Excel Micro Solutions. Call: (510)836-2040.

June 5–6 System Administration Of Windows NT Server Seminar. San Francisco. Center for Advanced Professional Development. Call: (714)261-0240.

June 5–6 Understanding Data Communications Seminar. San Jose. Data-Tech Institute. Call: (201)478-5400.

June 6 Multimedia Communications: Technologies, Systems, And Services Class. Pleasanton. AT&T Technical Education Center. Call: Adrian Kendrick, (510)224-3929.

June 6 Repetitive Strain/Carpal Tunnel Injury Free Workshop. Santa Clara. Dr. Michael Currie. Call: (408)249-3000.

June 6–7 AutoCAD ADE Class. Sausalito. The ACADemy. Call: (415)331-9466.

June 6–August 15 Empowering The Audience: Basics Of Multimedia Interaction Design Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

June 7 Paradox 4.5/5.0 For DOS/Win Level 2 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

June 7–8 Installing And Troubleshooting Windows NT Server Seminar. San Francisco. Center for Advanced Professional Development. Call: (714)261-0240.

June 7–9 Avid: Intro To Media Composer Class. San Francisco. Bay Area Video Coalition. Call: (415)861-3282.

June 7–July 5 Intro To Authorware Professional Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

June 7–July 12 Intro To Fractal Painter Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

June 8 HP Laser Printer Repair Hands-On Class. Oakland. Excel Micro Solutions. Call: (510)836-2040.

June 8 MS Office 4.2 Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

June 8 PowerPoint 4.0 Win/Mac Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

June 8 Word 6.0 Win/Mac Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

June 8–9 Fundamentals Of AutoCAD Class. Sausalito. The ACADemy. Call: (415)331-9466.

June 8–9 Troubleshooting The Mac Workshop. San Jose. Data-Tech Institute. Call: (201)478-5400.

June 9 WordPerfect 6.0 For Windows Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

June 10 Careers In Multimedia Seminar. San Francisco. SFSU Extended Education. Call: (415)904-7700.

June 10 Media Composer Editing Tips And Techniques Class. San Francisco. Bay Area Video Coalition. Call: (415)861-3282.

June 12 Access 2.0 Level 2 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

June 12 Excel 5.0 Win/Mac Level 2 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

June 12 Image And Communication Skills For Women Workshop. Santa Rosa. National Businesswomen's Leadership Assoc. Call: 1-800-258-7246.

June 12 Object-Oriented Programming In C Class. Pleasanton. AT&T Technical Education Center. Call: Adrian Kendrick, (510)224-3929.

June 12–13 Accessing The Internet Seminar. San Francisco. Data-Tech Institute. Call: (201)478-5400.

June 12–13 Network Fundamentals Hands-On Class. Oakland. Excel Micro Solutions. Call: (510)836-2040.

June 12–13 The Laser Printer Survival Course. San Francisco. Data-Tech Institute. Call: (201)478-5400.

June 12–13 Troubleshooting And Maintaining The IBM PC And Compatibles Seminar. Sacramento. Data-Tech Institute. Call: (201)478-5400.

June 12–13 Understanding Client/Server Computing Seminar. Sacramento. Data-Tech Institute. Call: (201)478-5400.

June 13 Image And Communication Skills For Women Workshop. San Francisco. National Businesswomen's Leadership Assoc. Call: 1-800-258-7246.

June 13 Learn To Use The Internet For Fun And Profit Class. San Francisco. The Learning Annex. Call: (415)788-5500.

June 13–14 Fundamentals Of Data Communications And LANs Seminar. San Francisco. Data-Tech Institute. Call: (201)478-5400.

June 13–16 Elementary AutoCAD Class. Sausalito. The ACADemy. Call: (415)331-9466.

June 14 Image And Communication Skills For Women Workshop. San Jose. National Businesswomen's Leadership Assoc. Call: 1-800-258-7246.

June 14 Internet For Writers Class. San Francisco. The Learning Annex. Call: (415)788-5500.

June 14 WordPerfect 6.0 For DOS Level 2 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808.

NOVELL NETWORKS • SYSTEMS INTEGRATION • RAPAIRS & UPGRADES

COMPU/RUN SYSTEMS

CALL FOR LATEST PRICES

486-75 MHz

- IBM 75MHz Motherboard w/256K Cache
- 4MB of RAM
- 1.44MB Floppy Drive
- 420MB Hard Drive
- Super VGA Card with 1MB of RAM and windows accelerator
- 14" Super VGA, NI, 0.28 Monitor
- Mini-Tower Cases w/250W Power Supply
- 101 Enhanced Keyboard
- Microsoft Compatible Mouse

**Other Configurations Available*

$849

486/66 ECONOMY

- 486DX2/66 VESA Local BUs w/256K Cache
- 4MB of RAM
- 1.44MB Floppy Drive
- 420MB Hard Drive
- IDE 2FD/2HD/2Serial/1Parallel/1G Card
- Super VGA Card with 1MB of RAM and Windows Accelerator
- 14" Super VGA, NI, 0.28 Monior
- 101 Enhanced Keyboard
- Mini-Tower Cases w/250W Power Supply
- Microsoft Compatible Mouse

**Other Configurations Available*

$879

486/66 SUPREME

- Genoa 486DX2/66 Motherobard with 256K Cache
- 4MB of RAM
- Teac 1.44MB Floppy Drive
- 540MB, IDE Hard Drive
- Genoa VLB, 1MB Video Card
- 14" Super VGA, NI, 0.28 Monitor
- VLB, IDE /I/O Card
- 101 Enhanced Keyboard
- Microsoft Compatible Mouse
- Mini-Tower Cases w/250W Power Supply
- Package of DOS 6.22 with Manual and Diskettes
- Free Games Software Loaded

**Other Configurations Available*

$1029

PENTIUM 90/100MHz

- Intel Penitum 90/100 MHz Motherboard with 256K Cache, IDE, I/O
- 8MB of RAM
- 1.44MB Floppy Dirve
- 540MB IDE Hard Drive
- Diamond Stealth 64, PCII, 2MB Vidoo Card
- 14" Super VGA, NI, 0.28 Monitor
- 101 Enhanced Keyboard
- Mid-Tower Case w/250W Power Supply
- Microsoft-compatible Mouse
- Package of DOS 6.22 with manual and diskettes.
- Free Games Software Loaded.

**Other Configurations Available*

$1849 $2049

NOVELL

Server and workstation installation and setup performed by certified Netware Engineers. We also do network maintenance and repair. •Netware 3.12, 4.02 •Personal Netware •Fax-Server •E-Mail •Remote Lan Access

Netware 3.12	$Call for Pricing
Netware 4.1	$Call for Pricing
Learn how to install, setup and maintain Novell Networks	**$199**

MOTHERBOARDS

EISA	
486DX2-66/DX-50/DX-33 (NICE/ASUS)	$285/270
(8xEISA, 1xVLB Slots)	
ISA	
486DX2-66/DX-50/DX-33	$115
(3 slots LB w/256k, 72 pins) (GENOA)	
486DX4/PCI (GENOA/ASUS/ECS)	$120/146/145
(5XISA,4XPCI slots with 256K)	
486DX2-66/DX4/100	$105
(3X LB slots, 3-72-Pin, 4-30 Pin mem Slots W/256K)	
486DX2-66/DX-40/DX-33 (NICE)	$128
486DX2-66/DX-50/DX-33 (ASUS)	$115
(2 slots Local Bus w/256k)	
486DX2-66, 4 slots PCI, 4 ISA (NICE)	$198
Intel Pentium 90/100Mhz w/ 256k cache	$295/335
(2 PCI, 4 ISA, 1X PCI/ISA Share slots. 1x PCI IDE & 1xISA IDE Interface on board. 2 Serial and 1x Parallel ports on board)	
Pentium 90/100 M/B w/Intel Chipset (ASUS)	$245/290
IBM	
IBM Blue-lightning, 75MHz w/CPU & 256K cache IDE/I/O	$195
IBM 486SLC2-66 VLB w/ CPU, mathco and 128k cache	$145

VIDEO CARDS

SVGA	1MB w/Windows Accelerator (Oak)	$56
SVGA	1MB (Trident)	$58
DIAMOND		
Speed Star 64, PCI, 1MB		$120
Stealth 64, 2MB DRAM PCI/VLB		$162
ORCHID		
Kelvin 64 VLB/PCI, 1MB/2MB		$128/170
GENOA		
8500 VLB Turbo		$84
Phantom 32i 2MB		$152
Phantom 64 VLB/ PCI w/ 2MB		$182

MONITOR

ViewSonic 14", SVGA, 0.28, NI	$260
ViewSonic 15", SVGA, 0.28, NI	$Call
EYEQ 14" SVGA 1024 X 768 0.39	$175
EYEQ 14" SVGA 1024 X 768 0.28 Int	$199
EYEQ 14" SVGA 1024 X 768 0.28NI	$208
SAMSUNG Syncmaster3, 14", 0.28 SVGA Int	$218
SAMSUNG Syncmaster3Ne, 14", 0.28, NI SVGA 1024 x 768	$228
SAMSUNG Syncmaster14GL, 14", 0.28 MPR-II, NI MAC Comp	$269
SAMSUNG Syncmaster15GL, 15", 0.28, MPR-II SVGA, NI Mac Comp	$341
SAMSUNG Syncmaster17GL, 17", 0.28, 1280 x 1024, MPR-II, SVGA, Mac Comp	$638
SAMSUNG Syncmaster4NE, 15", 0.28, SVGA, NI, Mac Comp	$295

WINDOWS NT

Windows NT/NTAS installation and setup performed by trained engineers. *Call for Pricing*

EXPRESS REPAIR SERVICE

P.C and Laser Printer repair and upgrades performed while you wait. Low Labor Charge. All repairs warranted. Both in-shop & on-site service available.

HARD DRIVES

MAXTOR		
540MB	7540AV	$178
850MB	7850AV	$235
1.2 GB	71260A	$355
CONNER		
420MB	**CFS420A**	**$165**
540MB	**CFS540A**	**$179**
850MB	CFA850A	$239
1.2GB	CFA1275A	$355
1 GB	(CFP 1080S) SCSI-II	$475
2GB	(2105S) SCSI-II	$850
WESTERN DIGITAL		
540MB	WDAC2540	$205
730MB	WDAC2700	$225
850MB	WDAC8500	$245
1GB	WDAC3100	$355
QUANTUM		
540MB	Lightening (540LT SCSI)	$220
540MB	MV540A/MV540S	$178/$210
730MB	LT730AT/LT730S	$225/$240
1GB	EMPIRE 1080S (SCSI)	$555
2.1GB	32150S	$875
MICROPOLIS		
1GB SCSI/IDE		$565/565
1.7GB IDE/SCSI		$912/912
SEAGATE		
1GB & 2GB SCSI		$535/1050

FLOPPY DRIVES

TEAC 1.2MB FDD	$42
TEAC 1.44MB FDD	**$31**

SOUND CARDS

Sound Blaster 16 MCD	$85
Media Magic ISP/16 with audio	**$63**

MULTIMEDIA BUNDLES

Sony double-speed CD-ROM
Media Magic 16-bit sound card
Pair of speakers

$180

CD-ROM

Mitsumi	CD ROM double speed	$110
Sony	CD ROM double speed	$110
Teac	**Quad Speed AT**	**$175**
Mitsumi	Quad Speed IDE	$190
Toshiba	3601 BSCSI, X4 CD ROM	$295

CONTROLLERS

IDE	2FD/2HD 1:1	$12
IDE	VL 2FD/2HD 1:1	$21
SCSI	Adaptec 1542 CF	$199
SCSI	Adaptec 1542 CK	$246
SCSI	Adaptec 2940W	$246
IDE	I/O Card	$13
AT	I/O Card (2S/1P/1G)	$11

CASES

Mini Tower case w/ 250 W PS	**$34**
Desk Top case w/ 250 W PS	**$35**
Medium Tower case w/ 250 PS	**$52**
Full Tower case w/ 250 W PS	**$65**

MODEMS

Zoltrix 96/24 Internal Fax/Modem	$29
Etech 14.4/14.4 Fax/Modem	$59
Ziig 14.4/14.4 Fax/Modem	$60

NETWORK CARDS

NE 2000 16 bit	$28
NE 2000 16 bit software config	$31
NE 2000 combo	$32
NE 2000 16 bit combo soft. config	**$30**
CWL 8900, Combo, s/w config.	$35

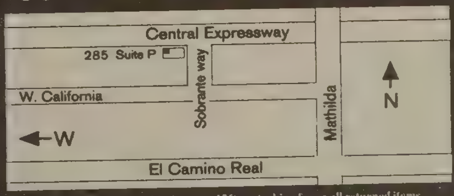
COMPU/RUN SYSTEMS

(408) 245-2760 & (408) 245-2761
Fax (408) 245-2762
285 Sobrante Way Suite P
Sunnyvale CA 94086
M-F 9-6p Sat 10a-5p Sun 11a-4p

ONE YEAR PARTS AND LABOR WARRANTY.

MasterCard VISA

CORPORATE P.O'S WELCOME



Prices subject to change without notice. Prices based on Cash/Check. Limited stock on sale items. Dealer inquiries welcome. Not responsible for typographical errors. 15% restocking fee on all returned items.

QUALITY AD BY PRECISION GRAPHICS OF SANTA CLARA

HITRON SYSTEMS

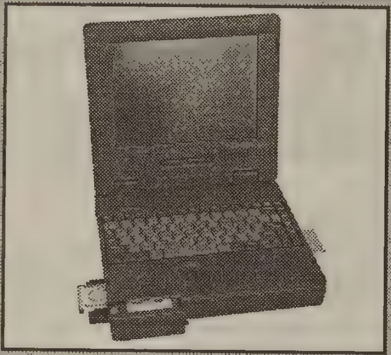
STOP

SEARCHING AROUND! COME TO HITRON SYSTEMS...WE ARE HAVING A SPRING SALE!

HOT, SMART, POWERFUL NOTEBOOK FOR HITRON

PENTIUM POWER NOTEBOOK

2 DAY SERVICE GUARANTEED!



STANDARD FEATURES:

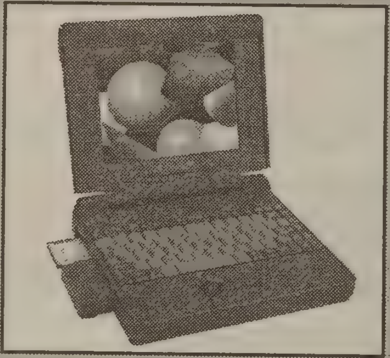
- PCI BUS w/256K Cache
- 8 MB RAM (Expandable to 16/24/40MB)
- Removable Hard Drive
- 1.44 Floppy Drive
- 32 Bit VLB w/1MB Display
- LCD/External & Simultaneous Display
- 9.5" Screen Size
- 16 Bit Sound Card Built-In
- PCMCIA-1 Type II & 1 Type III Slot
- Parallel/1 Serial Port
- Built-In Track Ball Mouse
- Built-In Microphone and Speaker
- Docking Station Option
- 8.15 Lbs

DISPLAY	CPU TYPE	340MB	540MB	720MB
DUAL SCAN	PENTIUM 90	$2921	$3066	$3226
ACTIVE COLOR	PENTIUM 90	3989	4116	4326

ACCESSORIES:

8MB RAM	$395	PCMCIA Ethernet Card Coax/UTP	155
16 MB RAM	720	Ni-Metal Battery	140
32 MB RAM	1495	External Numeric Keypad	65
PCMCIA Fax 14.4/14.4	140	On-Site Service 1 Year	35

486 VESA LOCAL BUS MULTIMEDIA NOTEBOOK



STANDARD FEATURES:

- w/128K Cache
- 4 MB RAM (Exp 8/12/20/36 MB)
- 170 MB Removable Drive
- 1.44 MB FDD
- 32 Bit VLB w/1MB Display
- LCD External Simultaneous Display
- 1024x768 SVGA Output To External Monitor
- 8 Bit Sound Card Built-In
- 2 Type II or 1 Type III PCMCIA Slot
- 1 Parallel/1 Serial Port
- Built-In Trackball Mouse
- Built-In Speaker & Microphone
- Docking Station Option
- 6.2 Lbs

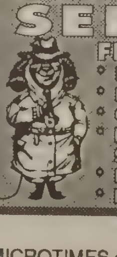
CPU TYPE	MONO	DUAL SCAN	ACTIVE MATRIX
486DX-33	$1279	$1715	$2415
486DX2-66	1319	1751	2451
486DX4-100	1470	1899	2595

ACCESSORIES & UPGRADES:

Upgrade To 250 MB	Add $75	NICAD Battery	100
Upgrade To 340 MB	Add 160	N-METAL Battery	135
Upgrade To 540 MB	Add 330	PCMCIA Fax Modem 96/48/24	139
Upgrade To 810 MB	Add 390	PCMCIA Fax Modem 14.4/14.4	140
4 MB RAM	Add 210	PCMCIA Ethernet Card Coax/UTP	155
16 MB RAM	Add 835	On Site Service 1 Year	35

NETWORKING SERVICES

FROM HITRON



- LANTASTIC
- NOVELL
- CNE ON STAFF
- HARDWARE & SOFTWARE INSTALLATION
- DESIGN
- FREE CONSULTATION

BRAND NAME SYSTEMS FEATURING HIGH QUALITY MOTHERBOARDS FROM

AMI MICRONICS NICE

CALL FOR PRICES & SPECS

90 DAYS SAME AS CASH

- 1 YEAR PARTS WARRANTY
- LIFETIME LABOR & TECH SUPPORT
- NATIONWIDE ON-SITE SERVICE AVAILABLE
- CORPORATE PO'S WELCOME
- CORPORATE LEASING AVAILABLE

Sound Like A Dream? HITRON Will Make It Happen For You!
When We Say We Can Save You Money...We Mean It!
When We Say High Quality, Low Price Is Our Goal...We Do It!
Don't Believe It? Just Pick Up The Phone And Give Us A Call.
We Will Match Or Beat Any Of The Advertised Prices!

AFFORDABLE 486 PCI *Systems*

486DX4-100 MHz Intel	$1089
486DX2-66 MHz Intel	$1039
486DX2-80 MHz AMD	$1059
486DX-33 MHz Intel	$939
486SX2-50 MHz Intel	$899

- Intel DX-486 Processor
- 256K Cache Expandable to 512K
- 4 MB RAM Expandable to 128 MB
- 1.44 MB Floppy Drives
- 420 MB IDE Hard Drive
- PCI IDE Controller Card
- I/O with 2 Serial, 1 Parallel, 1 Game
- Cirrus Logic PCI w/1 MB RAM
- 14" SVGA .28dp Monitor
- 101 Enhanced Keyboard
- Mid Tower Case w/230W PS

HITRON VESA LOCAL BUS *Systems*

486DX4-100 MHz Intel	$1079
486DX2-66 MHz Intel	$929
486DX2-66 MHz AMD	$889
486DX-33 MHz Intel	$872
486SX2-50 MHz Intel	$869

- 256K Cache
- 4 MB RAM Expandable to 32 MB
- 1.44 MB Floppy Drives
- 420 MB IDE Hard Drive
- Vesa Local Bus 32 Bit IDE Cont 2H/2F I/O with 2 Serial, 1 Parallel, 1 Game
- VESA Local Bus SVGA Card w/1MB RAM
- 14" SVGA .28dp Monitor
- 101 Enhanced Keyboard
- Mini Tower Case w/230W PS
- Serial Mouse

POWERFUL Pentium EISA PCI *System*

Pentium 90 MHz
$3199

- Intel Pentium 90 MHz Processor
- Dual Pentium Processor Option
- EISA PCI Motherboard Expandable to 512K Cache
- 16 MB RAM Expandable to 128MB
- 1.44 MB Floppy Drive
- 1.0 GB SCSI Hard Drive
- Adaptec 2940 PCI SCSI Controller
- I/O Card w/2S/1P
- ATI Ultra Turbo 64 Bit PCI w/2 MB VRAM Video Card
- 15" CTX SVGA Non-Interlaced Monitor (1280x1024) .28dp
- 101 Enhanced Keyboard
- Full Tower Case w/ 250W Power Supply
- 3 Button Serial Mouse

Options:

2nd Pentium 90 MHz CPU:	+$608
1 GB SCSI Tape Back-Up:	+$645
ATI Ultra Turbo 64 Bit PCI w/4MB:	+$199

HOT!!! *Pentium + PCI Systems*

PENTIUM PCI 60/66	$1355/$1373
PENTIUM PCI 75	$1365
PENTIUM PCI 90/100	$1565/$1743

- Intel Pentium Processor
- 256K Cache
- 8 MB RAM Expandable to128 MB
- 16KB Internal Pentium Cache
- 1.44 MB Floppy Drives
- 420 MB IDE Hard Drive
- PCI IDE Controller w/UART 16550 Card
- I/O with 2 Serial, 1 Parallel, 1 Game
- PCI Orchid Kelvin w/1 MB Video Card
- 14" SVGA .28dp NI Color Monitor
- 101 Enhanced Keyboard
- Mid Tower Case w/250 W PS

• CUSTOM CONFIGURATION WELCOME • CUSTOM CONFIGURATION WELCOME •

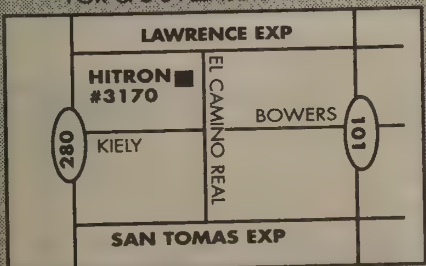
MONITORS

Impression 14" .39/.28	$180/200
Impression 14" .28 NI	210
Impression 7 17"	555
GVC 14" .28 Low Radiation	205
CTX 15" .28 NI	299
ADI 15" 4GP	348
ADI 17" 5EP .28	595
ViewSonic 15 NI 1280x1024	405
ViewSonic 15ES 15" 1024x768	375
ViewSonic 17" 1600x1280	810
ViewSonic 17G 1280x1024	690
Sony 15 5F	419
Sony 17 5E1600x1200	902
Mag DX15/17	345/615
Mag MX15/17	454/780

DISPLAY CARDS

ATI Ultra Win Turbo 64 PCI/4 MB	$450
ATI Ultra Win Turbo PCI/VLB 2 MB	265
Orchid Kelvin 64 VLB/PCI 1 MB	125
Orchid Kelvin 64 VLB/PCI 2 MB	165
Diamond Stealth 64 PCI/VLB 4 MB VRAM	390
Diamond Stealth 64 PCI/VLB 2 MB VRAM	269
Diamond Stealth PCI/ 1 MB DRAM	125
Diamond Stealth PCI/2 MB DRAM	178
Cirrus Logic 5428 VLB/1 MB 2 MB	75/112
Cirrus Logic 5434 PCI/1 MB	89

Call For More
FOR CPU'S PLEASE CALL



HARD DRIVES

420 MB IDE	$175
540 MB IDE/SCSI	195/225
730 MB IDE/SCSI	235/260
830 MB IDE	270
1.0 GB IDE	379
2.1 GB SCSI	850

MODEMS/TAPE BACK-UPS

14.4/14.4 Int/Ext	$67/105
28.8/28.8 Int/Ext	106/139
250 MB Tape Back-Up	150
350 MB Tape Back-up Int/Ext	165/325

MOTHERBOARDS

486SX/DX-25/33/50/66	$85
486SX/DX-25/33/50/66 PCI	148
Asus Pentium MB For 90/100 256K	250

FLOPPY DRIVES

1.44 MB (3.5") FDD	$29
1.2 MB (5.25") FDD	32

MOUSE

3 Button Serial	$8
Microsoft Serial	24
Logitech First Mouse	28

CONTROLLER CARDS

32 Bit 2940 SCSI Card	$195
32 Bit 2940W SCSI Card	239

MULTIMEDIA CD-ROMS

Sony 55E Double Speed	$115
Toshiba 4X SCSI	305
NEC 3X IDE	195
Mitsumi 4X IDE	195
Teac 4X IDE	190
Plextor 4X SCSI	395

SOUND CARDS

Creative Lab 16	$78
Creative Labs 16 w/ASP	115
Creative Labs 16 SCSI	108
Creative Labs 16 SCSI w/ASP	155
Creative Labs 32 AWE	257
Creative Labs Edutainment	393

MULTIMEDIA UPGRADE KITS

Diamond 2X Kit-1000	$309
Diamond 4X Kit-5000	435

CALL FOR OTHER ITEMS NOT LISTED

MULTIMEDIA PACKAGES

1) SONY Dual Speed CD-ROM
Sound Blaster 16 Bit
With Items Below
$269

2) TEAC 4X Speed CD-ROM
Sound Blaster 16 Bit
With Items Below
$340

3) TOSHIBA Quad Speed
Sound Blaster 16 Bit SCSI
With Items Below
$460

ABOVE 3 PACKAGES INCLUDE:

- Stereo Speakers
- Microsoft CD Titles Kit Including:
  - -Encarta
  - -Works
  - -Money
  - -Golf
  - -Complete Baseball

FOR MORE OPTIONS OR INFORMATION PLEASE CALL:

HITRON SYSTEMS

HITRON SYSTEMS
3170 EL CAMINO REAL
SANTA CLARA, CA 95051
(BETWEEN LAWRENCE EXP. & SAN TOMAS EXP.)
TEL: (408) 261-2695 • Fax: (408) 261-2698
MON-FRI: 9-6 SAT: 10:30-4:30 EMail Sales: hitron@ix.netcom.com

• All Special Order Items Non-Refundable • Prices Subject To Change w/o Notice • Not Responsible For Typos • Price Reflects Cash Discount

User Group Network

BULLETIN BOARDS

MULTIZONE

Adventure Connection. (408)244-8160, 734-9475; (415)321-3661, 365-7002, 573-1063, 225-0263, 928-4781; (510)797-4101, 232-1127. 8-N-1, 24 hrs. Realtime, multiuser, interactive fantasy role-playing game; chat. Free trial. [Exp. #136.]

BayHomeNet. (408)732-1101, (415)595-0103, (510)744-0407. 8-N-1, 24 hrs., 9600. Online interactive real estate, "Bay Area Backyards" forums, rates, more! [Exp. #138.]

Club California. (415)585-3205; (510)268-8198, 724-5755. 24 hrs., 19,200. Internet email, newsgroups, IRC, chat, games, MatchMaker. Subscription/free trial. Sysops: Rand Al' Thor and Joseph. [Exp. #138.]

Pathway BBS. (408)956-5600, (510)790-3127, (714)236-4247. 8-N-1, 1200–14,400. 16 lines. Get into the swing of things. Adults only. [Exp. #138.]

209

Exxxtacy BBS. (209)962–4045. Seven CD-ROMs, DOS/Windows/OS2/adult files, free adult video with each membership. [Exp. #137.]

408

#1 Fun Seekers. (408)734-5501. 8-N-1, 24 hrs., 14,400+. Four lines. IBM games, Windows, DOS utils., large adult area, members "free" ads. [Exp. #137.]

A32 BBS. (408)378-8252. 19,200. Two lines. Mac, Newton, FirstClass, OneNet member network, files, conferences. [Exp. #138.]

Amateur Action BBS. (408)263-3393, 14,400; (408)263-1868, 21,600. 8-N-1. 40 lines. 22,000+ adult amateur GIF files. [Exp. #136.]

Anatomically Correct BBS. (408)733-7429. 24 hrs., 14,400. Adults only. Chat, articles, X-rated personals, matchmaker, no GIFs, more. Free. Sysop: Howeird. [Exp. #138.]

Angst BBS. (408)684-1514. 8-N-1, 24 hrs., up to 14,400. Everything happening Santa Cruz County—calendar, message topic areas, files. Free. Sysop: Cameron Jackson. [Exp. #138.]

BeanCounter:Network-Systems;BBS. (408)379-4680. 8-N-1, up to 115,000. Support for networking, multimedia, and database programming; areas for academia. Free 30 min./week. [Exp. #136.]

Burn This Flag. (408)363-9766. 24 hrs., 1200–14,400. Pagans, NIRVANAnet, Usenet, Fetish GIFs, Internet, and *Crank* Magazine. [Exp. #136.]

The Checkered Demon BBS. (408)264-9018. 8-N-1, 24 hrs., up to 14,400. Premier RPG and fantasy BBS. Comics, Hero Games products, more. Sysop: John Taber. [Exp. #138.]

Construction Bid Source. (408)956-7942. 8-N-1, 24 hrs., 14,400. Construction projects, sub-bid requests, advertise jobs, equipment, supplies, services. Free/pay. [Exp. #136.]

Daddy & Me, Your Virtual World. (408)354-9602. 24 hrs., 14,400. Two lines. Mac and PC, games, Internet, jobs. All free. [Exp. #138.]

Dads & Kids. (408)998-3237. 2400–14,400. Voice help (408)438-6658. IBM and Mac. Custody, legal, support, counseling, men's groups, software, and more. [Exp. #137.]

Dalik's Dungeon. (408)263-4584. 8-N-1, 24 hrs., 300–28,800. Free! Messages! Free! Games! Free! CD-ROM! Free! Files! Free! Free! [Exp. #137.]

The Duck's Pond. (415)586-3615. 24 hrs., 14,400. Are you into games? If so, try out the Pond. [Exp. #138.]

Escape To Other Worlds BBS. (408)956-1750. 14,400. Four lines. Online matchmaking, chat, Internet, RIME, Fido, shareware, 2GB. [Exp. #138.]

Eternal Nights BBS. (408)338-1729. SLUGnet, doors, message bases, .mod music files, and more. Free. Sysops: Nosferatu and Lucas. [Exp. #137.]

EXODUS/BDPA Silicon Valley Chapter. (408)654-8911. 8-N-1, 28,800. EXODUS newsmagazine + Black Data Processing Associates; multicultural publication + IT professionals; BDPANet/Afronet/Internet email. Sysop: Willie Mackey. [Exp. #137.]

File Exchange HQ. (408)526-0949. 24 hrs., 9600–28,800. Free after call-back. [Exp. #137.]

Garlique Graphics Image Center. (408)847-0665. Home of the Garlique Ladies, full Internet for members, adult CDs, instant access. [Exp. #137.]

The Halibut BBS. (415)961-9635. Message board only. RIME and SFNet messages. Sysop: Marge Smith. [Exp. #138.]

The Hidden Lair BBS. (408)979-0812. 1200–28,800. Multichat, adult files, games, messages, 5GB+ of storage. Free. Sysops: Drakkhen and Diana. [Exp. #137.]

The Hole. (408)998-0139. 8-N-1, 24 hrs., 14,400. Pagan, Christian, Buddhist, Zen, and metaphysical BBS. National/worldwide messages, more. Free. [Exp. #136.]

Info Online. (408)956-1962. 9600–28,800. Multiline. Windows-based, chat, email, airplane, career, computing, lifestyle, more. Free trial. [Exp. #138.]

Interact. (408)245-1967. 24 hrs., 1200–14,400. The Interactive Entertainment System. 16 lines of chat and games. 18/over. [Exp. #138.]

Laser Light BBS. (408)365-7778. 8-N-1, 24 hrs., 9600–28,800. Most complete archive of PC shareware games and game demos. Free! Sysop: Rob Mueller. [Exp. #138.]

LINCS-BBS. (408)727-7227. 8-N-1, up to 14,400. Resources for special needs. Disability files, national resource directory, Usenet. $25/yr for Internet. Sysop: Trudy Grable. [Exp. #138.]

LiveWire. (408)298-8646. 14,400. 24 lines. Metro newspapers, event listings, files, Usenet/OneNet, Internet email, chat. Free/pay. [Exp. #137.]

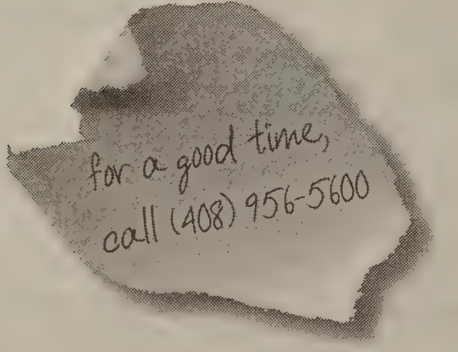
Lucid Dreams Café FC BBS. (408)354-4376. 24 hrs., 14,400. Cyberspace coffeehouse. Premium fresh-roasted coffee. Stimulating information and conversation. Free. Sysop: Robin Chew. [Exp. #138.]

Mainstreet Online. (408)224-7523. 8-N-1, 23 hrs. (down at 3 am), 300–28,800. Internet email, Usenet newsgroups, gigabytes of files, no adults-only materials. [Exp. #138.]

The Meating Place BBS. (408)926-6174. 24 hrs., 14,400. Nine lines. Gay/Bi, adult, email, chat, matchmaker, GIFs, XXX stories. System password: MICRO. [Exp. #137.]

The MicroClassified Ads. (408)336-4608. 8-N-1, 24 hrs., 1200–14,400. Buy/ sell any items online. Place personal ads. Free to buyers. [Exp. #137.]

Mongoose BBS. (408)733-3034. 24 hrs., 14,400/28,800. Two lines. SmartNet, 4+GB of the latest



Still haven't tried the Pathway BBS? Take a look at what you're missing. Using your computer and modem, you can connect to a whole world of pleasure and communication With 16 lines, there's no problem connecting and speeds from 1200 - 14.4k bps are supported Once you're connected, there's plenty to do online. With 11+ gigs of files to download, our hard drives are bursting with the hottest pictures We also have an unprecented 14 CD-ROMs online Try our SuperChat system, where you can talk live with other users drop by the Online Games section, or visit our Adult Shopping Emporium For the ultimate in entertainment, pick up the West Coast Digital Disk magazine, previously available only in stores With so much to do, why wait? Brought to you by Pathway Communications

Fremont/Newark: 510-790-3127, Southern CA: 714-236-4247, Portland: 503-226-2665, Sacramento: 916-454-0940, San Diego: 619-699-5750. Adults Only. Terminal = 8.N.1. 14 CD-ROM system available on Northern CA board.

GRAVEYARD SHIFT

ALL ADULT BBS

'as HOT as it gets'

Great GIFS
Animations
local scene
ThrobNet
SwingNet
RIP graphics

MasterCard VISA

HOME OF S.F.
STRIPPERS &
SLUTS™
NEW MODELS
EACH MONTH

(415) 397-1038
(510)540-6048

Always YOUR COMPLETE PC CENTER

Pentium 90 PCI

- **Intel** **Pentium** 90 MHz CPU
- 3 PCI & 4 ISA Slots Motherboard
- 540MB IDE Hard Disk
- Enhance 101-key Keyboard
- 8MB High Speed RAM
- Medium Tower Case
- 250W Power Supply
- 1.44MB Floppy Supply
- 2 Hi-Speed Serial, 1 Printer Port
- PCI IDE Controller
- PCI S3 SVGA card w/1MB
- 14" Non-interlace SVGA monitor

$1899

Pentium 66 PCI w/SVGA	**$1795**
Pentium 66 VLB w/SVGA	**$1745**
Pentium 60 VLB w/SVGA	**$1615**

486 DX2-66 VLB

- **AMD** 486 DX2-66MHz CPU
- 256K Cache
- 4MB High Speed RAM
- 420MB IDE Hard Disk
- Enhance 101-key Keyboard
- **Acer** 3 VLB, 4 ISA Slots
- Mini Tower Case w/250W PS
- 1.44MB Floppy
- VLB SVGA w/1MB
- 14" SVGA monitor
- IDE I/O Card

$999

486DX2-50 VLB system	$959
486DX-33 VLB system	$929
486DX-40 VLB system	$939
486SX-33 VLB system	$899
486DLC-40 VLB (Opti)	$879
540MB	add $20
8MB / 16MB	add $160 / $395

Multimedia NOTEBOOK

- **Intel 486 SX-33SL CPU**
- 4MB (8, 16, 20 or 32 optional)
- 9.5" Monochrome display
- 258MB Hard Disk (344MB / 540MB optional)
- 1.44MB Removable Floppy Drive
- Built-in 25mm Trackball at Center
- VLB Windows Accelerator Video Card w/1MB support 1024x768 at 256 cols.
- Built-in Audio - Sound Blaster Compatible, w/built-in speaker
- Ports: 1S, 1P, 1 Ext. SVGA, 1 Ext. Keyboard
- Power: 4 Hr to 8 Hr with "Double Life" Tech, Auto Switching AC/DC Adaptor 1.5 Hour Fast Battery Charge, Power Saving, Doze, Sleep & Suspend
- MS DOS 6.2

$1399

486 DX-33, 258MB, Dual Scan Color	**$1950**
486 DX2-66, 340MB, Active Color	**$3150**

- **TOSHIBA**
- **IBM**
- **CANON**
- **NEC**
- **COMPAQ**

Call for Best Price...

System Upgrade Center

MEMORY UPGRADE

Take advantage of low cost trade-in program
Upgrade your system's memory NOW!

2MB upgrade to 4MB	$160
4MB upgrade to 8MB	$160
8MB upgrade to 16MB	$592
8MB upgrade to 16MB w/trade-in	$396

386 UPGRADE TO 486

	Cyrix	AMD	Intel
486DX-33	$240	n/a	$260
486DX-40	$250	$285	n/a
486DLC-40	$185	n/a	n/a
486DX2-50	$255	$295	$285
486DX2-66	n/a	$305	$335

** Motherboard with CPU upgrade subject to $45 labor charge*

CPU UPGRADE

	AMD	Intel
486DX-25 to 486DX2-66	$157	$191
486DX-33 to 486DX2-66	$157	$191
486DX2-50 to 486DX2-66	$157	$191
486DX4-100	$Call	$Call

**** with CPU trade-in program - Call***

$25 labor charge for all CPU upgrade

PLEASE CALL FOR COMPLETE SYSTEMS UPGRADE

CD-ROM

Panasonic Office Automation OA

562 320ms 300 kb/s internal / w.ctrl	125/139

SONY.

55S 2x-speed internal 220ms, 360kb/s	215
55E 2x-speed internal 220ms, **IDE**	125

TOSHIBA

3601B 4x-speed internal, SCSI-II, caddyless	305

Controllers

adaptec

1542CFK 16-bit SCSI-2 KIT w. drives, cable	235
2842VL-32-bit VLB fast SCSI-2/w.kit,drv,cable	235 /260
2940 - 32-bit PCI Fast SCSI-2/ w.kit, drive, cable	299

CHICOTEC

IDE I/O ISA 2FD/2HD/2S/1P/1G // Fast 16550	15// 45
VLB IDE I/O 2FD/2HD/2S/1P/1G // Fast 16550	20 // 55

Motherboard

VLB 486-66/100, 256K w/o CPU	99
Pentium 90 PCI w/256K w/o CPU (PC Wave)	**185**

Drives

CONNER

420MB	IDE	CFS-420A	14ms	1" X 3.5"	Call
1.08GB	IDE	CFA1080A	9.5MS	1"X 3.5"	Call
1.06GB	SCSI	CFP-1060S	10ms	1" X 3.5"	Call

Maxtor

540MB	IDE	7546A	12ms	1" X 3.5"	Call

Quantum

540MB	IDE	540A	**12ms**	Call
540MB	IDE	540A	14ms	Call
540MB	SCSI	540S	12ms	Call
1.0GB	SCSI-2	1080S	9.5ms	Call
1.4GB	SCSI-2	1440S		Call
2.1GB	SCSI-2	2100S		Call

Memory

1MB x 9 (1MB)	SIMM	40
4MB x 9 (4MB)	SIMM	138
1 x 36 (4MB) / 1 x 32	SIMM	160/155
2 x 36 (8MB) / 2 x 32	SIMM	315/295
4 x 36 (16MB) / 4 x 32	SIMM	545/485
8 x 36 (32MB)	SIMM	Call

CALL FOR CURRENT LOW PRICE

Modem & Fax

USRobotics

Sportster Fax 144 S/R	int/ext	99/125
Sportster 28.8 **V.34**	int/ext	225/245

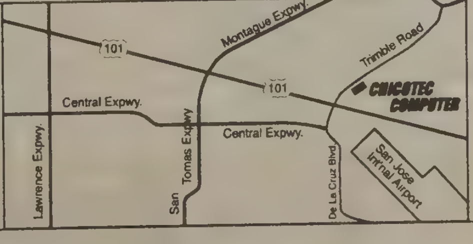
Monitor .... Call

Video Card ... Call

CHICOTEC COMPUTER

542 West Trimble Road, San Jose, CA 95131
Tel: (408) 954-8998 Fax: (408) 954-1135

Corner of 101 and Trimble



- All prices are subject to change without notice.
- Corp., Gov't. and Educ. Purchase orders are welcome and subject to credit approval.
- All returns are subject to 15% restocking fees.
- No refund after 30 days.
- Shipping, Insurance and COD charges are extra and non-refundable.
- Not responsible for typographical errors.
- Price reflects cash discount.

41695

BULLETIN BOARDS cont.

shareware on CD-ROM. Free. Sysop: Robert Yagmourian. [Exp. #136.]

Monterey Gaming System. (408)655-5555. 14,400. 32 lines. Free Internet email, chat, contests, games, Doom/Doom II. Free trial. [Exp. #136.]

Mountain Retreat. (408)335-4672. 24 hrs., 14,400. FidoNet, 2.9GB HD, 20,000+ files, Turbo Pascal is the specialty. Sysop: John Jamieson. [Exp. #137.]

The New World. (408)259-6246, 926-3742. 2400–14,400. Files, Virtual-Net network, online games: Lord, Usurper, TradeWars II. Adult areas. Free/$5 per year. [Exp. #137.]

Pacific Exchange BBS. (408)946-8561. Link to satellite online for new DOS/Windows/OS2 files, Internet email, chat, more. [Exp. #137.]

Paradise City BBS. (408)280-6630. 2400–14,400. 25K+ newest IBM, Windows, adult files; RIP graphics, mouse support. Free. Sysop: Jim Reed. [Exp. #138.]

P.D.S.E. (408)241-0722. 8-N-1, 24 hrs., 2400–9600. Eight lines (no busy signals). Clean files, discussions, games, helpful people. [Exp. #137.]

Phallicide. (408)883-9535. Recline on our Ottomans! NIRVANAnet. [Exp. #136.]

The Shuttle BBS. (408)289-1911. 24 hrs., 2400–28,800. 8GB+ of files, six CD-ROMs, Doom, multimedia, online games, and more. Sysop: Michael Vedda. [Exp. #137.]

Silence Is Golden BBS. (408)526-9566. 1200–14,400. San Jose's loosest BBS. Unlimited downloads, no ratios, no security checks. Free! Sysop: Crazy Tyrone Brown. [Exp. #138.]

The Silicon Matchmaker. (408)492-9700. 24 hrs., 300–14,400. 20 lines. Personal introductions—you meet the nicest people online. [Exp. #138.]

The Support Network BBS. (408)259-0297. 8-N-1, 24hrs., 2400–14,400. ADA Network, ABLEDATA database, Trace Research Center Library, educational files, RIP graphics. Free. Sysop: Frank Arnold. [Exp. #136.]

Sweet Whispers BBS. (408)229-9001. 8-N-1, 24 hrs., 14,400. 10 lines. Adult social network, chat, MatchMaker, email, forums, library, RIP. Free trial. [Exp. #137.]

Synerchat BBS. (408)929-1980. 24 hrs., 14,400. 20 lines. Chat, mail, messages, game connection. Free trial. Sysop: Joe Cram. [Exp. #136.]

Thunderbird Real Estate. (408)475-2400. 24 hrs., 14,400. Two lines. 150+ listings, color photos, relocation info, tech support (408)475-8400. Free. [Exp. #137.]

Thunder Mountain BBS. (408)978-0302. 8-N-1, 24 hrs., 14,400. Eight lines. Chat, files, games, MatchMaker, More. Free Family Fun. [Exp. #138.]

Time Bender-Long BBS. (408)257-2119. 8-N-1, 24 hrs., 300–28,800. Heathen programmers, WWIV network, and BBS support. All free. [Exp. #137.]

TIPS BBS. (408)265-7529. 8-N-1, 24 hrs., 1200–14,400. Internet email, Usenet newsgroups, latest shareware, technical support. Free/fee. [Exp. #137.]

VidGam2 BBS. (408)737-7791. 28,800. Nine nodes. Multizone; steamy adult GIFs; games; utils.; Internet newsgroups, email, FTP-mail. Sysop: Marcelo Hassmer. [Exp. #138.]

Virtual Valley Community Network. (408)999-0966. 14,400. 16 lines. Metro/KTEH, city info, files, Usenet/OneNet, Internet email, chat. Free/pay. [Exp. #137.]

Yurope BBS. (408)257-5071. 24 hrs., 14,400. News, info, files on former Yugoslavia. Internet, mailing lists, GIFs. Free/pay. Sysop: Miroslav Dragojevic. [Exp. #136.]

415

ABACUS Online. (415)587-8062. 8-N-1, 24 hrs., 1200–14,400. Messages, files, and information on Atari computers, MIDI, Jaguar, and Lynx online. Free. [Exp. #136.]

Airtight Garage. (415)641-0348. 8-N-1, 24 hrs., 300–28,800. FidoNet/Internet motorcycling, science fiction, and firearms msg. areas. Free. Sysop: Carlos. [Exp. #137.]

A.S.D.I.P. (415)468-3886. Up to 28,800. Six lines. 60,000 files, over 18GB, adult issues. Free trial. [Exp. #136.]

Bay Area State Parks. (415)726-0358. 8-N-1, 24 hrs., 9600. Bay Area State Parks information BBS. Free. [Exp. #136.]

Bay Window BBS. (415)755-2939. 24 hrs., DOS and Windows utilities, games, email, no GIFs or handles allowed. Sysop: Judy. [Exp. #136.]

Breaking Bay BBS. (415)566-0385. 24 hrs., 300–14,400. NoCal's SCUBANET supporting the sport of SCUBA diving and underwater photography. $5/year. Sysop: Charlie Eng. [Exp. #137.]

Catene I. (415)592-6259. Dating, jobs, astrology, coupons, UFO, files, self-help. Free trial. [Exp. #137.]

ClipperNet-Headquarter MuM BBS. (415)949-0172. 24 hrs., 1200–28,800. The xBase development-only BBS: Clipper, dBase, FoxPro, Force/FCO. Free. [Exp. #136.]

CooL EdgE BBS. (415)564-2006. 8-N-1. Tons of files, adults and more; online games and ConFereNce. Free. [Exp. #138.]

Dead Point. (415)992-4320. 8-N-1, 14,400. 40 online games, variety of IBM files, messages. Free access. [Exp. #136.]

DivaNet. (415)695-7452. 24 hrs., 14,400. Alternative fashion and entertainment network; online fetish fashion store; JPEG downloads. 18+. $10/month. [Exp. #137.]

The Family BBS. (415)459-6094. 24 hrs., 14,400. Usenet, Internet mail, parenting, childcare, health, investments, software, hardware. Free/Fee. [Exp. #138.]

Flying High BBS. (415)467-7839. 24 hrs., 9600–28,800. Gay/straight Asian XXX, games, L.O.R.D. ongoing, verification for adult access. Free. [Exp. #138.]

Gamers BBS. (415)592-4496. 8-N-1, 24 hrs., 2400–14,400. Hints, tips, walk-throughs for many video and PC games, more. Free access. Sysop: Anthony. [Exp. #138.]

Games & Stuff BBS. (415)369-1110. 8-N-1, 24 hrs., 14,400. Internet newsgroups and email, shareware, local movie theater guide. Free/pay. Sysop: Paul. [Exp. #136.]

Golden Gate Computer Society BBS. (415)457-2516. 24 hrs., 14,400. 2GB of files, 30 min/day free. ILink, Cal.Link: free. Usenet and Internet email: $24/year. [Exp. #137.]

Hempland BBS. (415)369-HEMP. 24 hrs., 14,400. World's first all-Cannabis online database. Nonprofit, educational. Always free. [Exp. #136.]

Interact. (415)961-6911. 1200–14,400. The Interactive Entertainment System. 16 lines of chat and games. 18/over. [Exp. #138.]

Key Software Products BBS. (415)364-9847. 5 pm–8 am M–F, 24 hrs. wknds. 1200–28,800. Tech support for Last Byte Memory Manager. Internet email, fax-mail, shareware. Free. Sysop: Dan Lewis. [Exp. #136.]

Lincoln's Cabin BBS. (415)752-4490. 2400–28,800. Internet email, Usenet, RIME, files! Give us a call! Free trial. [Exp. #137.]

The Mac Daddy BBS. (415)587-9052. 24 hrs., 14,400. Best local message area, too many nets to list, three+ CD-ROMs of Mac files. Sysops: Jonathan Mergy, Robert Pomon. [Exp. #137.]

Marinfo BBS. (415)383-9226. 8-N-1, 24 hrs., 2400–14,400. Marin's community information center. Email, Usenet, chat, more! Mac/Windows GUI. Free/fee. [Exp. #138.]

The Mother Ship. (415)665-5496. 8-N-1, 24 hrs., 14,400. New visions of planet Earth, leading-edge consciousness, community. Sysop: Roland Campos. [Exp. #136.]

The Natural World. (415)261-1212. 9600. San Francisco Mycological Society, mushrooming, nature, politics. Free. [Exp. #136.]

The Pyramid/2 OS/2 BBS. (415)494-7497. 8-N-1, 24 hrs., 2400–14,400. Provides the latest in OS/2 files,

PACIFIC EXCHANGE
Your Friendliest BBS Experience...
and it Starts with your First Call!

- Receive Your Free Trail Membership
- Link to Satellite & Download Software
- Explore 16 CD ROM's & 100,000 files
- Read USA Today Morning News
- Compete with others in Online Games
- Buy/Sell items thru Classified Ads
- "CHAT" with other Users Worldwide
- Call 16 lines for less "Busy Signals"

(408) 946-8561

Nitelog BBS
33 Nodes
56,000 Files
Fidonet / Internet Email
Usenet / Rime / ILink Email
DOS / WINDOWS / NT
OS2 / UNIX / MAC
& ADULT FILES
(408) 655-1096
28.8k Lines Available too!
VISA

THE MOON ANGEL
BEEP BEPP CD-ROM
600+ megabytes of high quality
adult images and animation
Featuring lovely Asian women!
ONLY $40.00 (+ tax/S&H)
To order, set your modem to dial:
MOON ANGEL SYSTEMS BBS
(510) 235-8560 (510) 236-8192
(510) 235-0724 28.8k V.FC/V.34

Earth and your health were the most important concerns our engineers had when making MGC monitors. This 17- inch, state-of-the-art, high resolution monitor delivers clear, rich images at an affordable cost for desktop publishers, as well as for today's demanding business and game applications. It has a power management system which complies with EPA Energy Star and VESA Display Power Management Signaling (DPMS) guidelines. This monitor also complies with the Swedish MPRII (low radiation) for better eye protection.

energy

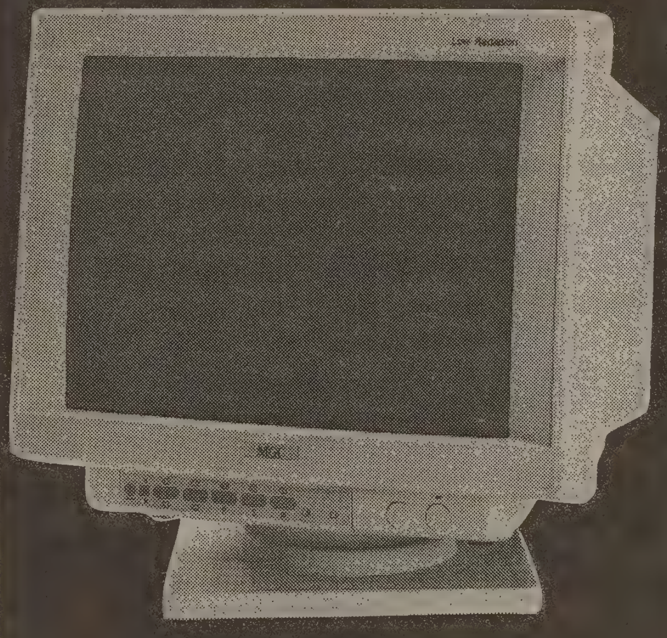
EPA POLLUTION PREVENTER®

This 17-inch monitor has advanced features and roomy displays. You get premium graphics with a fine 0.26mm dot pitch and a non-interlaced maximum resolution of 1280 x 1024. The screen is also non-glare and anti-static. So you are able to enjoy a larger and sharper picture with minimum eye fatigue!

ISO-9000 Certified

MGC®

With the Most Intelligent Graphic Mode Control



MGC-1765VAF 17"

dot pitch	resolution	vertical sync.	horizontal sync.
0.26mm	1280 x 1024	50-100Hz	30-65KHz

TWO YEARS
PARTS & LABOR WARRANTY

Theta Computer Corp. of America
(310) 572-1613
Software One
(818) 854-4066
Micro City
(619) 689-0660
High Tech Supply, Inc.
(405) 843-4873

How many times have you tried to adjust your screen in order to see the whole picture and later on you have to do it again for different programs? The 17-inch monitor is equipped with 21 programmable modes for different settings. There are 12 factory presets and 9 custom defined programmable modes. The monitor will detect the setting for the programs you want to run, and save you time and frustration in the future from constant screen adjustments.

2 YEARS PARTS & LABOR WARRANTY

With the flat screen tube design, light reflection disturbances and other distortions common in regular monitors, are eliminated to provide a sharper and more comfortable image.

MPR-II (low radiation)

MGC is committed to bringing you the highest quality monitors with the most affordable prices you will find in this vast market. So, call a local distributor for more information on 14-, 15- and 17-inch monitors.

BULLETIN BOARDS cont.

information. Files added daily. Free. Sysop: Sven Sampson. [Exp. #138.]

realitycheckBBS. (415)648-9489. 14,400. Instant access, coffee, cigars, tech and text, back in SF! NIRVANAnet. [Exp. #136.]

The Gift Shop
To Get the BEST
Adult Images in the
World, You Just Need
to Push the Right Buttons...
(510) 609-1123

Recovery BBS. (415)255-2188. 8-N-1, 24 hrs. Dedicated to 12-step recovery programs: AA, NA, Al-Anon, OA, etc. Fido 1:125/9. Free. Sysop: Rich Gorin. [Exp. #137.]

TamTech BBS. (415)759-5529. 8-N-1, 24 hrs., 2400–14,400. New BBS dedicated to quality shareware, freeware files for IBM compatibles. Free. [Exp. #138.]

Toad Hall BBS. (415)595-2427. Mature user system, no adult graphics, files, Internet, Usenet, RIME, Intelec, ILink, etc. Sysop: Gordon Anderson. [Exp. #137.]

Uncle D's Directory. (415)364-3001. Five V.34 lines. Internet email, RIME, private conferences, files, stores, games, more. Free/fee. [Exp. #136.]

VidGame BBS. (415)742-6486, 369-7356; (510)601-0771. 28,800. Nine nodes. Adult files; 1000s utils.; Internet newsgroups, email, and FTP-mail; more. Sysop: George Hassmer. [Exp. #138.]

510

& the Temple of the Screaming Electron. (510)935-5845. 14,400. Four lines. 1.4GB of unusual text and shareware. NIRVANAnet HQ. [Exp. #136.]

Albatross! Gardening Club BBS. (510)449-8750. 8-N-1, 24 hrs., 28,800. IBM files (utils., games, shareware), some Mac files, CD-ROM, more. Free. Sysop: Paul George. [Exp. #138.]

Amiga Addicts Anonymous BBS. (510)680-2850. 24 hrs., 1200–14,400. Amiga files only. Free. Sysop: Stanley R. Poland. [Exp. #137.]

Awaiter BBS. (510)939-9992. 24 hrs., 28,800. Internet, newsfeeds, email; OPUS, UFO, paranormal, anarchy, files, games. Free. [Exp. #137.]

Bay Area Mega Board. (510)247-8300. 24 hrs. 16 lines. Chat, TBBS USysOp, VSysOp, FidoNet, adult/gen. Free and fee. Sysop: Sam Thompson. [Exp. #138.]

Bowl Of Chili BBS. (510)352-8907. 8-N-1, 24 hrs., 2400–14,400. Home of "Chritter Chili" cookoff team. Recipes, files, CD-ROM, family board, more. Free. Sysop: James Reed. [Exp. #138.]

The Cat's Meow BBS. (510)471-0603. 24 hrs., up to 14,400. Local and Fido, adult, Doom, medical, parenting, pets, movie reviews. Free. Sysop: Jim Rawlings. [Exp. #137.]

Caxius BBS. (510)895-6961. 24 hrs., 300–14,400. Technical focus, 60+ message bases, active debate forum, more. Free! Sysop: Ed Correia. [Exp. #138.]

The City Of Night BBS. (510)521-7827. 8-N-1, 24 hrs., 300–14,400. Teleconference, Internet mail, libraries, for young adults. Free. [Exp. #136.]

Coin Collection BBS. (510)609-7230. 24 hrs., 14,400. Need free software (Mac or Windows 3.1) to log on, call (510)798-7887. $10/month. [Exp. #137.]

The Common Sense BBS. (510)713-7336. 8-N-1, 23 hrs., 28,800. Your electronic communications connection to the Libertarian Party of California. Absolutely free. [Exp. #137.]

Computer Addiction. (510)278-2287. 8-N-1, 6–10 pm, 2400–14,400. We have shareware, networks, adult, online programs, and much more. [Exp. #136.]

Dr. Jack's Thing. (510)689-4022. 20,000+ files for all ages. Asian and other adult GIFs. Free email. Games and much more. [Exp. #138.]

The GIFt Shop BBS™. (510)609-1123. 8-N-1, 24 hrs., 2400–28,800. The hottest adult BBS you'll ever call. Free samples. 30GB+. [Exp. #138.]

GMV-BBS. (510)294-9052. 8-N-1, 24 hrs., 300–9600. Multiline. Teleconference, private chat, email, SIGs, games; Amiga, IBM, Mac files. Fee. [Exp. #136.]

Gold Diggers BBS. (510)568-7807,,,23,23 (must include ,,,23,23 to get BBS). 24 hrs., 2400–14,400. IBM, Atari ST, Amiga, Mac; files, door games, messages. $10 per year. Sysop: Harry Goldberg. [Exp. #136.]

Governed Anarchy. (510)226-6656. Files, games. NIRVANAnet. [Exp. #136.]

Highway Access BBS. (510)865-6400. 8-N-1, 24 hrs., 300–14,400. Three lines. Over 4.7GB of OS/2, DOS, Windows, and Mac shareware. [Exp. #136.]

Jetstream BBS. (510)252-9131. 24 hrs., 28,800. Over a quarter million files, 60 CD-ROMs online. Free trial. [Exp. #137.]

K 3 & Company. (510)370-3719. A private resume listing service. ASCII only, please. [Exp. #136.]

KNight Court BBS. (510)946-1049, 933-6126, 525-5874. Tons of online games; chat lines, Internet database; Games Central! Free. [Exp. #137.]

LiverGulch BBS. (510)606-9846. 24 hrs., 28,800. Four lines. New! Windows-only, multitasking BBS. Science, technology, NASA GIFs, Windows shareware. Sysop: Ken Marsh. [Exp. #136.]

Maddog! BBS. (510)895-8089, 483-0203. 24 hrs., 2400–28,800. 10 CD-ROMs, online games, FidoNet, HotNet, sports, tons of files. Free/fee. Sysop: Troy Earp. [Exp. #137.]

New Life Christian BBS. (510)754-4520. 8-N-1, 24 hrs., 300–14,400. Message area, Bible, reference, AFA, CRI files. Seekers, skeptics welcome. [Exp. #137.]

Olde Stuff BBS. (510)530-3051. 8-N-1, 24 hrs., 9600. Antiques and collectibles. Buy, sell, trade. History, genealogy, events. Free. [Exp. #138.]

The Phantom Zone BBS. (510)538-9586. 8-N-1, 24 hrs., 300–14,400. Three lines. Files, messages, games, echo mail, FidoNet, Internet email. Friendly sysop. [Exp. #137.]

Planet Mirth. (510)786-6560. 8-N-1, 24 hrs., 14,400. Sinfully silly, NIRVANAnet, Internet news. [Exp. #136.]

Pleasant BBS! (510)689-0519,,22. 24 hrs., 14,400. Most new GIFs, games, shareware, adult files, more. Very friendly sysop. Free/fees. [Exp. #136.]

The Shaven Yak. (510)672-6570. A legal resource for sovereigns. NIRVANAnet. [Exp. #136.]

$tar Net BBS. (510)893-9341. 24 hrs., 2400–14,400. Online games, online matchmaker, online ordering, 2GB+ adult GIFs, CD-ROM. Free. [Exp. #138.]

Terminal One BBS. (510)673-9217. 28,800. Four lines. Files, games; Free Internet email, newsgroups. UUCP accounts available. [Exp. #136.]

The Unknown Realm. (510)885-0538. 35 hrs./8 days, 14,400. Call for a great time, FidoNet, large file areas, no ratios. Free. [Exp. #137.]

Amateur Action "Live"
ONE•ON•ONE
24 hrs./day
KINKY FOREIGN PHONE SEX
18 yrs & older
10718-1604-821-7911
No long distance charges!
Just $3.99/minute.
No CC Needed

Amateur Action BBS
World's Largest Collection of
Amateur Adult GIF Files.
Over 24,000 GIFs on line.
"The Information Super Highway"
"The Nastiest Place On Earth"
(408) 263-3393 28,800 V.FC
40 High Speed Lines
US Robotics 28,800 baud
Modems on all lines
Easy Connection! No Waiting!
VISA DISCOVER MasterCard

CONNER
420MB IDE
$165

CONNER
540MB IDE
$179

CONNER
850MB IDE
$239

MICROPOLIS
1GB SCSI MC4110
$525

WE CAN BEAT ANY PRICE IN THE MARKET!

SONIC 486DX2-66MHZ

- Genoa Turbo Express 486 Motherboard
- Intel 486DX2 CPU
- 256K Cache
- 4MB RAM
- Teac 1.44MB Floppy Drive
- 420MB Conner IDE Hard Drive
- VLB Controller Card
- Genoa 8500VL SVGA Accelerator w/1MB
- 14" NI .28dp Monitor
- Keyboard
- Mouse
- Mid-Tower Case

$959

DX/33....$929

SONIC 486DX2 MUTLIMEDIA

- Genoa Turbo Express 486 Motherboard
- Intel 486DX2 CPU
- 256K Cache
- 4MB RAM
- Teac 1.44MB Floppy Drive
- 420MB Conner IDE Hard Drive
- VLB Controller Card
- Genoa 8500VL SVGA Accelerator w/1MB
- MediaMagic 16 Sound Card
- Sony 2x CDU-55E CD-ROM
- Speakers
- 14" NI .28dp Monitor
- Keyboard
- Mouse
- Mid-Tower Case

$1129

DX/33....$1099

SONIC 486DX2 PCI

- ASUS 486PCI Motherboard
- Intel 486DX2 CPU
- 256K Cache
- 4MB RAM
- Teac 1.44MB Floppy Drive
- 540MB Conner IDE Hard Drive
- PCI Enhanced IDE / IO Controller Card
- Diamond Stealth 64 w/1MB DRAM
- 15" NI .28dp Monitor
- Keytronics Keyboard
- Microsoft Mouse
- Med Tower Case

$1099

DX4/100....$1169

SONIC PENTIUM PCI

- Inel Plato PCI Motherboard
- 90MHz Pentium CPU
- 256K Cache
- 8MB RAM
- Teac 1.44MB Floppy Drive
- 540MB Conner IDE Hard Drive
- PCI Enhanced IDE / IO Controller Card
- Diamond Stealth 64 w/1MB DRAM
- 15" NI .28dp Monitor
- Keytronics Keyboard
- Microsoft Mouse
- Med Tower Case

$1899

100MHz....$2059

486 SLC/2 66 Mhz SUPER BUY

- IBM 486 SLC/2 66 Mhz MB 64K Cache
- 4MB Memory
- 1.44 Floppy Disk Drive
- 420MB Hard Drive
- 101 Enhanced Keyboard
- Mini Tower Case
- 14" SVGA monitor .28 dot pitch
- IDE/IO VLB Card with 2S, 1P, 1G
- SVGA VLB 1MB Card

$779

MOTHERBOARDS

AIR	
486DX W/256K Cache (3 VL Slots)	$105
VP 486DX w/256K Cache (PCI/VL/386 Simms)	168
MI 486DX w/256K Cache (3 VL Bus/IDE I/O On board)	165
MIS 486DX w/256K Cache (2 VL Bus / SCSI-2 / IDE I/O)	189
IBM	
486SLC/64K Cache	125
486SLC 50MHz 64K Cache	115
Blue Lightning 75MHz	205
NICE	
486 SX/DX/DX2 256K	126
Mini EISA 256K	200
Super EISA 256K	260
Super EISA 512K	324
GENOA	
486SX/DX/DX2/DX4 72-Pin	115
486SX/DX/DX2 72-Pin	100
486SX/DX/DX2 (32-Pin)	112
OTHERS	
386-DX40 AMD	$81
386-SX40 AMD	55
486 SX/DX/DX2 256K Cache	79
486 SX/DX/DX2 (4 30PIN & 2 72PIN)	96

HARD DRIVES

MAXTOR		
420MB	IDE	$170
540MB	IDE	185
850MB	IDE	245
1.0GB	IDE	345
1.2GB	IDE	365
CONNER		
420MB	IDE	165
540MB	IDE	179
850MB	IDE	239
WESTERN DIGITAL		
210MB	IDE	$159
340MB	IDE	189
420MB	IDE	195
540MB	IDE	230
1.2Gig	IDE	360
MICROPOLIS		
1.0Gig	SCSI	535
1.7Gig	SCSI	890

GRAPHICS CARDS

GENOA	
8500VL 1MB (exp to 2MB)	84
8900VL (Phantom 32l) 2MB	149
8864VL (Phantom 64) 1MB /2MB	141/182
8864PCI (Phantom 64) 1MB/2MB	141/182
DIAMOND	
Speedstar VLB 1MB	95
Speedstar ISA 1MB	95
Stealth 24 VLB/ISA	119
Stealth 32 VLB/PCI (2MB)	150
Stealth 64 VLB/PCI 1MB/2MB/4MB	130/268/415
Viper VLB 2MB	250
OTHER GRAPHICS CARDS	
MGP Card	10
VGA 800X600	23
SVGA 1024X768	34
SVGA 1024X768	51
ORCHID TECHNOLOGY	
Kelvin 64, VLB/PCI 2MB	170
Kelvin 64, VLB/PCI 1MB	130
ATI TECHNOLOGIES INC.	
Graphics Pro Turbo PCI/VLB 4MB	460
Graphics Pro Turbo PCI/VLB 2MB	260
Graphics Expression 2MB PCI/VLB/ISA	210
Graphics Ultra Pro 2MB VRAM PCI/VLB/ISA	230/220/230
Graphics Ultra Plus, 2MB DRAM PCI/VLB/ISA	155
Graphics, Wonder 1MB DRAM PCI/VLB/ISA	100
SPIDER	
Spider 32 VLB 1MB/2MB`	90/130
Spider 32 VLB Plus 1MB/2MB	97/137
Spider 64 VLB/PCI 1MB/2MB/4MB	110/152/237
Spider 256 Cache 1MB/2MB	114/159
Black Widow Engine 1MB/2MB	136/190
Black Widow Plus 1MB/2MB	154/202
Tarantvia 64 PCI/VLB 1MB/2MB	252/371

HP Laser Printer Repair Available
Call us for the best prices on HP printers.

MOBILE MAX

PCMCIA Memory Card

• 1.6	$129
• 3.5	$189
• 7.6	$349

REPAIR & UPGRADE YOUR SYSTEM $20 FLAT FEE ON LABOR

CASE W/POWER SUPPLY

DeskTop Case w/230W PS	$35
Mini Tower Case w/230W PS	32
Medium Tower Case w/230W PS	50
Full Tower Case w/250W PS	70

CD ROM DRIVES

Sony CDU55E	$105
Panasonic CD562	105
Teac 4x	180
Toshiba 3501-B	278
Mitsumi 4x	180

SOUND CARDS

Sound Blaster 16 Basic	94
Sound blaster 16 Value Edition	99
Sound Blaster 16 MCD	130
Sound Blaster 16 SCSI	165
Sound Blaster 16 SCSI WRAP	199
Media Magic 16	61

CONTROLLER CARDS

AT I/O Card (2S/1P/1G)	$9
IDE 2FDD/2HDD	10
IO-P PrintER PORT LPI 1,2,3	7
IDE I/O (2S/1P/1G)	11
IDE I/O VLB (2S/1P/1G)	15
Adaptec 1542C	150
Adaptec 2842 VLB	195
Adpatec 2940 PCI	195
Promise DC4030 VL	100
Promise 2300 Plus	55

MONITORS

EYE-Q	
14" Mono	$68
14" VGA Mono	95
14" Super VGA 1024x768, .28 I	190
14" Super VGA 1024x768, .28 NI	202
SAMSUNG	
Syncmaster 3 14" Super VGA .28 I	218
Syncmaster 3 14" Super VGA .28 NI	329
Syncmaster 3 15" GL SVGA .28NI	325
Syncmaster 3 17" GL SVGA .28NI	641
Syncmaster 3 17" GLS SVGA .28NI	820
NOKIA	
447L 17" NI 1280x1024	755
447X 17" NI 1600x1280	999
ACER	
17" 1280x1024 .27	599
OPTIQUEST	
4000DC 1280x1024 .27	580
4500DC 17" 1600x1280 .28	669

NETWORK CARDS

ETHERNET	
NE2000 16-Bit 10 base T	$27
NE-2000 16-Bit BNC	26
NE-2000 Combo	29
NE-2000 Combo (3 in 1) ANSEL	69
3COM 3C509T Ethernet III	99

MODEM CARD/FAXES

2400 Internal Modem	$23
14.4/14.4 Fax/Modem	55
14.4/14.4 Fax/Modem External	97
14.4 AT&T External	105
28.8 US Robotics Int. Fax/Modem	220

MISCELLANEOUS

FLOPPY DRIVES	
1.2MB Teac	$39
1.44MB Teac	31
Mitsumi	14
Max Switch	21
Microsoft Mouse	24
Logitech MouseMan	30
3-Button Microsoft Compatible	7

CORPORATE P.O.S WELCOME

DISCOVER VISA ATM MasterCard

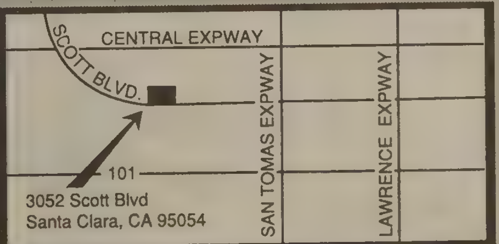
SONIC COMPUTERS

"ALL THE BEST FOR WAY LESS"

Fax (408) 727-5528
3052 Scott Blvd
Santa Clara, CA 95054

(408) 727-4362

MON-FRI: 9-6PM / SAT: 10-5PM



3052 Scott Blvd
Santa Clara, CA 95054

ANOTHER QUALITY AD BY PRECISION GRAPHICS & ADVERTISING OF SANTA CLARA

Prices Subject to change without notice. Limited stock on sale items. Dealer inquiries welcome. Not responsible for typographical errors.

BULLETIN BOARDS cont.

VA Listings. (510)637-1261. 24 hrs., 300–9600. Multiline. VA-owned homes for sale. Sysop: David Piersall. [Exp. #136.]

VisionBytes! (510)355-0968. 28,800. Vision care topics, eyecare referrals. Member: ASP, Apogee, Epic, FidoNet. Free. [Exp. #138.]

The VisualAge BBS. (510)685-9585. 8-N-1, 24 hrs., 2400–14,400. Local echomail nets, registered doors, three CD-ROMs, Internet email soon. Free/pay. Sysops: David Afana, Gus Damian. [Exp. #138.]

Visual Basic Only BBS. (510)674-9676. 300–14,400. New! For Microsoft Visual Basic programmers of all levels; files, forums. [Exp. #138.]

Windows Online. (510)736-8343. Largest Windows BBS. Members receive free Internet; 30,000 Win 3.x files. Free trial. [Exp. #137.]

Wishing Well BBS. (510)745-7901. 1200–14,400. Online games, quality files, ANSI art, RIP graphics, matchmaker, adult files. Sysop: MaryLou White. [Exp. #137.]

707

Connections. (707)526-4240. 2400–14,400. Full Windows GUI system, files, chat, email, online photo databases. Free. [Exp. #136.]

Ocean View BBS. (707)257-2235. 8-N-1, 24 hrs., 14,400. Internet, VirtualNET, FidoNet, HOGnet, online games. Napa, CA. Free. [Exp. #137.]

ZEPHYR: The Ultimate CyberBreeze. (707)421-1500. 8-N-1, 24 hrs., 2400–14,400. Games, files, Internet. Incredible graphics and music. Free/paid memberships. [Exp. #136.]

916

24th Street Exchange. (916)448-2483. 8-N-1, 24 hrs., up to 28,800. 38 lines, 26 CDs, FidoNet, USA Today, PC catalog, Internet email, chat. [Exp. #136.]

Contract joBBS. (916)863-3166. 8-N-1, 24 hrs., 2400–14,400. Computer job listings: contract programming and permanent, domestic and international. Free. Sysop: John Kunhart. [Exp. #138.]

EBS MicroSystems. (916)247-1206. 24 hrs., 1200–14,400. 10 lines. PCBoard, 24.3GB. Sysop: Bruce Knapton. [Exp. #137.]

GARLIQUE GRAPHICS
WORLD FAMOUS GIF'S
ADULT CD'S
FREE CATALOGS
SUBSCRIBE ON-LINE
MasterCard VISA AMERICAN EXPRESS
408-847-0665

LEGEND Graphics Online
Nation's One Stop Graphics BBS
VISA MasterCard AMEX
* SuperVGA Photo Images
* Adult GIF's, MoviePICs
Download Computer Graphics of tomorrow, today!
Modem:
(909) 689-9229
(NO per min./hrly fees)

Upgrade and update your advertising with...
MICROTIMES
Greater profit, increased sales, and more customers.
Call (510) 934-3700 for more information.

ASSOCIATIONS

Association For Systems Management & Data Processing Management Association. Meetings: 1st Wed., 5:30 pm, Mountain View. Networking, dinner, speaker; $20 to $25. Call: (408)727-3906. [Exp. #141.]

Association For Women In Computing. Meetings: 1st Wed., 6:00 pm, Stagecoach Restaurant, 44 Montgomery St., San Francisco. $10 members, $15 guests. Call: (415)979-8450. [Exp. #140.]

Bay Area Video Coalition. A place for independent videomakers to communicate with each other and the larger media community. $10 for nonmembers. Call: Anne Etheridge, (415)861-3282. [Exp. #140.]

Black Data Processing Associates, Silicon Valley Chapter. Meetings: 4th Thursday, 6:30 pm, Amdahl Corp., Bldg. H, 1240 E. Arques Ave., Sunnyvale. National network of DP professionals, educators, students, and vendor reps. Call: Willie Mackey, (408)280-7624 or email: *wjmackey@bdpabac.com* . [Exp. #140.]

Business Marketing Association. Meetings: 4th Wed., 11:30 am, Marriott Hotel on Great America Pkwy., Santa Clara. A professional organization for business-to-business marketing professionals; CBC certification, topical programs, seminars, job bank. Call: (408)365-9815. [Exp. #141.]

Center For Software Development. 111 West Saint John, Ste. 200, San Jose. Provides resources for self-service testing, prototyping, and porting on many different platforms. Call: (408)494-8378. [Exp. #141.]

Computer Professionals For Social Responsibility/Berkeley Chapter. Meetings: last Sun., 3:00 pm, BMUG Offices, 2055 Center St., Berkeley. Meetings are open to the public and free. Call: Karen, (510)987-0567 or *cpsr-berkeley@cpsr.org* [Exp. #140.]

Independent Computer Consultants Association, Northern California Chapter. Meetings: 2nd Tues., 6:00 pm, The City Club, 155 Sansome St., San Francisco. Open discussion, questions and answers. Call: (415)399-0305. [Exp. #141.]

National Writers Union. Meetings: 1st Wed., location changes. Monthly meeting for professional technical writers. Call: Andreas, (415)333-0921 or email: *andreas@netcom.com* . [Exp. #140.]

North Bay Information & Technology Association. Meetings: monthly, North Bay's premier trade organization for software and information technology professionals. $20 for nonmembers. Call: 1-800-457-5570 or (415)382-1108. [Exp. #141.]

Rexx Language Association. A consortium of those who deal at some level with the Rexx language. For membership info send name and address to *pjt@wrkgrp.com* or RexxLA Membership, 6300 N. River Rd., Ste. 501, Rosemont, Ill 60018; fax (708)696-2277. [Exp. #140.]

San Francisco ACM SIGGRAPH. Meetings: 3rd Fri., 8:00 pm, Computer Arts Institute, 310 Townsend St., Suite 230, San Francisco. Computer graphics and animation across a variety of industries including film, multimedia, and video games. Call: (415)642-9605. [Exp. #138.]

Society For Technical Communication, San Francisco Chapter. Meetings: 3rd Wed., 6:00, program at 6:45 pm, Stagecoach Restaurant, 44 Montgomery St., San Francisco. Job listings, guest speakers, technical publications competition, newsletter. Call: (415)985-7121. [Exp. #139.]

Society For Technical Communication, Silicon Valley Chapter. Meetings: 3rd or 4th Thurs., 5:30 pm refreshments, 6:30 pm dinner, 7:15 dessert. Sunnyvale Hilton, 1250 Lakeside Dr. (off Lawrence Expressway at 101). Guest speakers, special interest groups, networking, job listings, newsletter. Call: (408)737-9426. [Exp. #137.]

Software Forum (formerly SEF). Meetings: 3rd Wed., 6:30 pm, Elk's Lodge, 4249 El Camino Real, Palo Alto. Industry association dedicated to software developers and entrepreneurs, offering information and education on all facets of the software industry. Call: Barbara Cass, (415)854-7219. [Exp. #141.]

RELOCATION AND EXPANSION SALE!

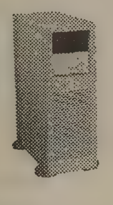
Versatile Features, Extraordinary Performance, Sleek Design, Always Reliable

3054 Lawrence Expressway, Santa Clara, CA 95051. More room to serve you!

Versatile Features, Extraordinary Performance, Sleek Design, Always Reliable

FULL DELUXE CASE

Special



Dual cooling fans, easy access swing open side doors. Slide'n snap drive rails, 5 exposed and 2 hidden drive bays, UL-listed power supply

Full size:
$140 (w/250W UL PS)
$160 (w/300W UL PS)
Med size:
$115 (w/250W UL PS)

MONITOR SALE

ADI SVGA NI GREEN

15" 1280x1024 .28	$369
17" 1280x1024 .28	$615

2 Year Warranty

GVC SVGA NI GREEN

14" 1024x768 .28	$197
15" 1024x768 .28	$295
15" 1280x1024 .28	$325

2 Year Warranty

IMPRESSION NI GREEN (TWO YEAR WARRANTY)

14" 1024x768 .28	$205
15" 1280x1024 .28	$325
17" 1280x1024 .28	$625

SONY NI GREEN

15" 15SF 1280x1024 .25	$445
17" 17SE 1600x1280 .25	$969
17" 17SF 1280x1024 .25	$845
20" 20SE 1280x1024 .30	$1825

CONTROLLER CARDS

SALE

ADAPTEC CTR

1542CF SCSI-2 ISA w/o Kit	$165
2842A SCSI-2 VLB w/o Kit	$199
2825 IDE/SCSI/IO w/Kit	$155
2940 SCSI-2 PCI w/Kit	$225
2940W SCSI-2 PCI w/KIT	$295

TEKRAM CACHE CTR

DC-600T ISA/IDE	$107
DC-620B EISA/IDE	$125
DC-320 EISA/SCSI	$125
DC-800 ISA/SCSI	$165
DC-800B ISA/SCSI w/1MB	$195
DC-820 EISA/SCSI	$325

MODEMS

2400 Modem	$18
96/24 Fax/Modem	$45
14.4K Fax/Modem	$54
14.4K Fax/Modem (ext)	$80

LYNX

Introducing the LYNX 486/586 VESA/PCI Local BUS Main Board (Motherboards Designed and Manufactured in The USA)

MADE IN U.S.A.

	486GI VLB	486G2 VLB	486 G3 (GREEN) VLB	486 VIP (GREEN) PCI/VLB NEW!	586 VIP P54C PCI/VLB NEW!
Chipset	Contaq	Contaq	Contaq	Contaq	OPTi 82C546, 547
BIOS	AMI	AMI	AMI	AWARD (Flash BIOS Optional)	AMI (Flash BIOS Optional)
Energy Saving	NO	NO	YES	YES	YES
Processors (SX/DX/DX2)	All Intel/AMD Cyrix (M7 series)	All Intel/AMD Cyrix (M7 series)	All Intel/AMD Cyrix (M7 series)	All Intel/AMD Cyrix (M7 series) **DX4-100** DX2-80	**INTEL Pentium** **P5-90MHz** **P5-100MHz**
Max. Memory	128MB (30 pins)	128MB (30 pins)	128MB (30 pins)	128MB **(72 pins)**	128MB **(72 pins)**
Max. Cache	256K	256K	1MB	1MB	512K
Expansion Slots	2 VESA BUS 6-16 bits ISA BUS	2 VESA BUS 6-16 bits ISA BUS	3 VESA BUS 5-16 bits ISA BUS	3 PCI BUS 1 PCI/ISA BUS 4-16 bits ISA BUS 2 VESA BUS	4 PCI BUS 2 VESA BUS 5-16 bits ISA BUS
CPU Socket	Standard	Ziff (overdrive)	Ziff (overdrive)	Ziff (overdrive)	Ziff (overdrive)
Bus Master	2 Slots	2 Slots	3 Slots	6 Slots	4 Slots
Dimension	8.7" X11"	8.7" X11"	8.7" X11"	8.7" X11"	8.7" X13"
Sale Price	**$118** (w/256K)	**$128** (w/256K)	**$138** (w/256K)	~~**$158**~~ $148 (w/256K)	~~**$258**~~ $238 (w/256K)

LYNX GALAXY Family PCs

(2% CASH DISCOUNT on System Purchase)

4DX-33 FAMILY PC

- 33MHz 486DX CPU
- LYNX Galaxy w/128K GI
- 4MB RAM
- 540MB 13ms IDE Hard Drive
- IDE I/O VLB
- Local Bus Graphics w/1MB
- 3.5" Diskette Drive
- 14" Color SVGA Monitor NI
- Mini Case w/PS
- 101-Key Keyboard & Mouse

$955

4DX2-66 FAMILY PC

- 66MHz 486DX2 CPU & Fan
- LYNX Galaxy w/256K GI
- 8MB RAM
- 540MB IDE Hard Drive
- IDE I/O VLB
- Local Bus Graphics w/1MB
- 3.5" Diskette Drive
- 14" Color SVGA Monitor NI
- Mid Case w/PS
- 101-Key Keyboard & Mouse

$1155 ~~**$1239**~~

4DX4-100 FAMILY PC

- DX4-100MHz CPU & Fan
- LYNX Galaxy w/256K VIP
- 8MB RAM (72 Pin)
- 540MB IDE Hard Drive
- Local Bus Graphic w/1MB
- 3.5" Diskette Drive
- IDE I/O VLB
- 15" Color SVGA Monitor NI
- Mid Case w/PS
- 101-Key Keyboard & Mouse

$1318 ~~**$1559**~~

P5-90 FAMILY PC

- INTEL 90MHz Pentium CPU & Fan
- LYNX Galaxy P54C w/256K
- 8MB RAM (72 Pins)
- 540MB IDE Hard Drive
- IDE I/O VLB
- SVGA Local Bus Graphic w/1MB
- 3.5" Diskette Drive
- 15" Color SVGA Monitor NI Green
- Mid Case w/250W
- 101-Key Keyboard & Mouse

$1715 ~~**$1967**~~

CPU'S

INTEL

Pentium 75/90/100MHz	$335 $495 $689
486DX4-100MHz	$250
486DX2-66MHz	$156
486DX-25/33/50MHz	$100/115/228
486SX-33/SX2-50MHz	$82/92

AMD

486DX4-100MHz (3V)	$185
486DX2-80MHz (3V/5V)	$145/175
486DX2-66MHz (3V/5V)	$135/149
486DX-40MHz	$135

CACHE MEMORY

32Kx8 20/15NS	$6/7
128Kx8 20NS	$24

SIMM MEMORY (MAJOR BRAND)

(30 pins)

1Mx3 70/60NS	$38/42
1Mx9 80/70/60NS	$37/41/44
4Mx9 80/70/60NS	$136/142/146

(72 pins)

1M 256Kx32 70ns	$38
4M 1x32 70/60ns	$140/148
4M 1x36 80/70/60ns	$162/166/170
8M 2x32 70/60ns	$284/290
8M 2x36 70/60ns	$320/330
16M 4x32 70/60ns	$459/474
16M 2x36 70/60ns	$532/542

Special Offer: (4 per customer, Limited Quantity)

- CPU and memory related products are not exchangeable or refundable
- Quantity is limited to stock on hand
- Not responsible for typos or technical errors
- All prices reflect COD cash discount
- Prices subject to change w/o notice

HARD DRIVE SALE

WESTERN DIGITAL

540MB IDE	$199
730MB IDE	$238
850MB IDE	$265
1.0GB IDE	$375
1.2GB IDE	$395

CONNER

270MB IDE	$149
420MB IDE	$175

Quantum

420MB IDE	$175
540M IDE	$185
1.08GB SCSI-2 (EM1080S)	$495
2.1GB SCSI-2 (EM2100S, 8.9ms)	$879

TOSHIBA notebook

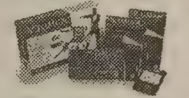
2.5" HDD SALE

340MB IDE 2.5"	$275
540MB IDE 2.5"	$478

MEDIA MAGIC ISP-16

Audio Board

16-Bit stereo recording and playback
5.5-48 Khz sampling rate
20-Voice OPL3 FM synthesis
AT-Bus CD-ROM Interface for Panasonic, Sony & Mitsumi CD-ROM



$63
(Limited Qty)

DOUBLE SPEED CD-ROM

Includes:
Sony Double Speed CD-ROM

Special

Only $114
($20 for installation)

SPEAKER SALE!

2W/40W	$8/32
50W/70W/80W	$29/37/45
120W/160W	$55/65

VGA CARDS

ATI

Graphics Wonder IMB PCI/VLB	$105/105
Ultra Pro 2MB-D Mach-64 PCI/VLB	$182/182
Ultra Pro 2MB-V Mach-64 PCI/VLB	$264/264
Pro Turbo 2MB Mach-64 PCI/VLB	$349/349
Pro Turbo 4MB Mach-64 PCI/VLB	$538/538

DIAMOND

Stealth 32 2MB PCI	$182
Stealth 64 2MB DRAM PCI/VLB	$188/188
Stealth 64 2MB VRAM PCI/VLB	$278/278
Stealth 64 4MB VRAM PCI/VLB	$398/398

ORCHID

Fahrenheit 64 IMB PCI/VLB	$159/159
Kelvin 64 Win. Accel. 1MB PCI/VLB	$145/145
Kelvin 64 Win. Accel. 2MB PCI/VLB	$192/192

SPIDER

Spider Black Widow 2MB VRAM VLB	$215
Spider 64 (PCI/VLB) 1MB/2MB/4MB	$135/185/285
Tarantula (PCI/VLB) 2MB/4MB	$279/399

MATROX

MGA-VLB 2MB VRAM Power Graphic	$399

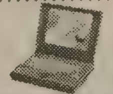
OTHERS

Trident 8900 ISA 1MB	$58
Trident 9440 VLB 1MB	$75

MONTHLY SPECIALS

NE 2000 16 Bits Ethernet Card	$30
486 SLC-33 ISA Board w/CPU	$84
Teac 1.2MB 5-1/4" FDD	$42
Teac 1.44MB 3-1/2" FDD	$32
Teac 1.2MB & Teac 1.44MB Bundled	$73
TEAC Dual (Combo) Drive	$86
IDE I/O ISA/VLB	$12/16
Mini/Med Tower Case w/PS	$34/50
Keytronic Keyboard	$24
MS Mouse	$25

Kiwi Notebook SALE!



GOVERNMENT, UNIVERSITY AND APPROVED CORPORATE P.O.'S WELCOME • 1 YEAR PARTS/ 3 YEARS LABOR/ LIFETIME TECH SUPPORT • LIMITED WARRANTY

LYNX

STORE HOURS
MON-FRI 9AM-6PM
SAT & SUN BY APPT. ONLY
SINCE 1987

NEW LOCATION!

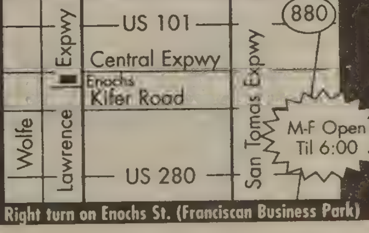
LTI Leopard Technology

INTERNATIONAL

3054 Lawrence Expwy, Santa Clara, CA 95051

NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS. PRICES SUBJECT TO CHANGE WITHOUT NOTICE. Prices reflect special discount. Company P.O.'s & Dealer inquiries WELCOME! CALL FOR CURRENT PRICES.

(408) 481-9288 FAX:(408) 481-0866



Right turn on Enochs St. (Franciscan Business Park)

USER GROUPS

AMIGA

AGA. Meetings: 7th of each month, 7:00 pm, SF State University. Graphics users group for all Amiga users of 2D, 3D, animation, multimedia, and video software. Call: Ollie, (415)863-8792. [Exp. #140.]

AUM—Amiga Users of Marin. Meetings: 3rd Tues., 7:30 pm. College of Marin, Science Center, Room 191, Kentfield. Call: (415)924-5384. [Exp. #140.]

AWEST Amiga Users In SF. Meetings: 2nd Wed., 6:30 pm, Excelsior Branch Public Library, 4400 Mission St. (near Ocean), San Francisco. Call: (415)474-1164, BBS (415)441-5145. [Exp. #140.]

FAUG—First Amiga User's Group. Meetings: 1st Tues., 7:30 pm, HT Electronics, 275 N. Mathilda Ave., Sunnyvale. Q&A, new product demos, public domain software. Call: Mike Fischer, (415)855-9816, BBS (415)341-7566, *mikef@vid.hp.com* . [Exp. #140.]

RE-Amiga—Redwood Empire Amiga Users Group. Meetings: 2nd Tues., 7:30 pm, Sonoma State University, Darwin Hall, Rm. 121, 1801 East Cotati Ave., Rohnert Park. Call: (707) 523-9978 or BBS (707)539-6944. [Exp. #140.]

TOGA—The Other Group Of Amigoids. Meetings: 4th Sat. (Sun. in April), 12:30 pm, Milpitas Community Library Meeting Room, 40 N. Milpitas Blvd., Milpitas. An informal group to share ideas, PD software, and information. Call: Lawrence Brown, (408)744-0162; Randy Abel, (408)356-9405. [Exp. #138.]

APPLE

PAUG—Peninsula Apple User Group. Meetings: 3rd Thurs., 6:30 pm, Computer Attic, 2750 El Camino Real, Redwood City. Beginners and advanced, question and answer, new product demos, public domain software. Call: Ted Wagner, (415)345-0751. [Exp. #140.]

SPC Apple User Group. Meetings: 2nd Tues., 6:45 pm, CompUSA, New Park Mall, Newark (I-880 exit west on Steveson or Morey). The Society for Prevention of Cruelty to Apple Computers Users Group supports all Apple and Macintosh computers. Call: Dean Fearn, (510)881-9160. [Exp. #141.]

ATARI

ABACUS—Atari Bay Area Computer Users Society. Meetings: 1st Sat. 1:00 pm, Potrero Branch Public Library, 2nd floor, 1616 20th St., San Francisco. Supporting all Atari computers and video games. PD software, MIDI, applications. Call: Roger Sinasohn, (415)469-7924. [Exp. #139.]

San Leandro Computer Club. Meetings: 1st Tues., 8:00 pm, San Leandro Main Library, Estudillo Room, 300 Estudillo Ave. Call: Robbie, (510)797-5636. [Exp. #138.]

CAD

BMUG CAD SIG. Meetings: last Wed., 6:00 pm, Academy of Art College, 79 New Montgomery, San Francisco. Environmental design/drafting. Call: (510)549-BMUG. [Exp. #137.]

Sonoma County AutoCAD Users Group. Meetings: 3rd Wed., 6:30 pm, Piner High School, Rm. H-83, 1700 Fulton Rd., Santa Rosa. Call: John Weitzel, (707)525-8147. [Exp. #137.]

COMMODORE

CHUG (Commodore Hayward User Group). Meetings: 2nd Sat., 2:00 pm, Palma Ceia Park Clubhouse, Hayward. (510)531-3734 or 793-7868. [Exp. #141.]

CWEST C64/128. 2nd Wed., 6:30 pm, Excelsior Branch Public Library, 4400 Mission St. (near Ocean), San Francisco. Call: (415)626-9946. [Exp. #140.]

Diablo Valley Commodore Users Group. Meetings: 3rd Thurs., 7:00 pm, Contra Costa Water District Anteroom, 1331 Concord Ave., Concord. Call: (510)689-3224. [Exp. #137.]

DESKTOP PUBLISHING

BMUG Desktop Publishing And Design SIG. Call: Les Cowan, (415)641-6033. [Exp. #138.]

CorelDRAW Ventura Users Group. Meetings: 1st Mon. (except when holiday, then 2nd), Varian Associates, 3075 Hansen, Palo Alto $2/person. Call: Rick Altman, (408)252-5448. [Exp. #139.]

Redwood Computers Desktop Publishing Training Center. Classes in programs such as Photoshop, Illustrator, QuarkXPress, PageMaker, CorelDraw. Call: (707)795-1700. [Exp. #139.]

IBM AND COMPATIBLES

AT&T Computer Users Group. Meetings: 1st Wed., 7:00 pm, 50 Fremont St., 40th Floor—near 1st and Mission, San Francisco. Demonstrations, technical support, informal discussion. Call: (415)885-6631. [Exp. #141.]

EastBay FOG. Meetings: 2nd Wed., 7:30 pm, Episcopal Church of St. John-in-Montclair, 1707 Gouldin Rd., Montclair. All microcomputers, MS-DOS, CP/M. Call: (510)653-2627. [Exp. #141.]

Golden Gate Computer Society. Meetings: 4th Mon., 7:00 pm, San Rafael Community Center, 618 B St., San Rafael. Free intro to computers class at 6:00 pm. Call: (415)454-5556. [Exp. #140.]

Napa Valley PC Users Group. Meetings: 2nd Wed., 7:30 pm, Napa High School Lecture Hall, 2475 Jefferson St., Napa. Call: Lee Schwab, (707)257-2675. [Exp. #138.]

PC Clubhouse. Meetings: 1st Fri., 7:30 pm, Meiklejohn Hall, Room 2002, CSU Hayward. Share knowledge and PD/shareware, network of BBSes, mentor assistance, SIGs. Swap starts at 7:00. Call: (510)538-2449 or 276-6450. [Exp. #138.]

PC Users Group Of The Redwoods. Meetings: 2nd Thurs., 6:30 pm, Santa Rosa Veteran's Memorial Building, East Dining Room, Maple Ave., Santa Rosa. Call: (707)527-USER; or Mel Del Gallo, (707)571-0373. [Exp. #141.]

Peninsula Computer Club. Meetings: 2nd Thurs., 7:30 pm, Rec Room, 222 Laurel St., San Carlos. DOS and CP/M libraries. Call: (415)593-9981. BBS (415) 571-9259. [Exp. #138.]

San Francisco Business Computers. Meetings: 4th Tues., 5:30 pm. 110 Pacific #153, San Francisco. For those who use computers in business. Visitors $10. Call: Jordan Rosenberg, (415) 788-5338. MCI Mail: 425-1545. [Exp. #138.]

San Francisco Computer Society. Meetings: 4th Mon., 7:00 pm, Presbyterian Church, 1329 7th Ave., San Francisco. CPM and DOS, novices welcome. Call: Bob Forsberg, (415)885-6202. [Exp. #138.]

San Francisco PC Users Group. Meetings: 3rd Tues., 6:15 pm SIGs, 7:30 pm General Meeting. St. Mary's Conference Center, 1111 Gough St., San Francisco. Call: (415)346-2644, events; Kendall Callas, (415)821-1310; Loyd Cribs, (415)751-5219. [Exp. #141.]

Software Forum (formerly SEF) Business Operations SIG. Meetings: 1st Tues., 7:00 pm, Center for Software Development, 111 W. St. John St., Ste. 200, San Jose. $10. Call: Mike Schmit, (408)244-6826. [Exp. #141.]

Software Forum (formerly SEF) International Software SIG. Meetings: 3rd Mon., 7:00 pm, Center for Software Development, 111 W. St. John St., Ste. 200, San Jose. $10. Call: Charlie Pfefferkorn, (408)923-7570. [Exp. #141.]

South Bay WordPerfect User Group. Meetings: 4th Tues., Saratoga Community Library, Fruitvale and Saratoga Ave., Saratoga. WordPerfect product presentations and education. Mainly Windows. Free. Call: Scott Maiden, (408)253-4591. [Exp. #139.]

Stanford Palo Alto PC User's Group. Meetings: last Wed., 7:30 pm, Varian, 3075 Hansen Way (off Page Mil Road), Bldg. 7, Auditorium, Palo Alto. Call: (415)952-5632. [Exp. #141.]

INTERNET

BMUG Internet SIG. Meetings: 2nd and 4th Weds., 7:00 pm, BMUG office, 2055 Center St., Berkeley. Accessing the Internet through World Wide Web using the Macintosh. Email: *dan_meriwether* or *susan_adrian @bmug.org* . [Exp. #137.]

Online And Interactive SIG. Meetings: 3rd Tues., 6:30 pm, usually at Software Publishing Corp., Bldg. 3, 3165 Kifer Rd., Sunnyvale. SIG of the Silicon Valley chapter of the Society for Technical Communication. Call: Charly Rhoades, (408)379-7000 ext. 1414 or *charly@hal.com* . [Exp. #137.]

Software Forum (formerly SEF) Internet SIG. Meetings: 2nd Wed., 7:30 pm, Sun Microsystems, 2750 Coast Ave., Bldg. 6, Mountain View. $10. Call: (415)390-9477. [Exp. #141.]

LEGAL

BMUG Law SIG/ Law SIG South. Meetings: irregular. Call: Randy, (916)661-2280 or *rbs@aol.com* . [Exp. #137.]

SF Bar Assoc. WordPerfect User Group. Meetings: 3rd Wed., odd-numbered months, noon, SF Bar Assoc. Boardroom, 7th Fl., 685 Market St. Brown bag meetings. Call: (415)421-5650. [Exp. #137.]

MACINTOSH

Association Of A32 Users. Meetings: 2nd Sat., 10:00 am, Sunnyvale Community Center Arboretum, 550 E. Remington Ave. (near corner of El Camino and Fair Oaks). Q&A session; guest speakers and vendor demonstrations; shareware, freeware, and PD software disks. Call: (408)263-0398. [Exp. #141.]

BMUG—Berkeley Macintosh User Group. Meetings: every Thurs., 6:00 pm, Warren Hall, Rm. 22, UC Berkeley campus. Call: (510)549-BMUG. [Exp. #137.]

BMUG LesBiGay SIG. Meetings: 3rd Sun., 6:00 pm, BMUG office, 2055 Center St., Berkeley. Call: see the LesBiGay conference on Planet BMUG (bmug.org). [Exp. #137.]

BMUG West. Meetings: last Mon., 6:30 pm, San Francisco Exploratorium. Call: (510)549-BMUG. [Exp. #137.]

Diablo Valley Macintosh User Group (DVMUG). Meetings: 3rd Tues., 7:00 pm, Bancroft School, 2200 Parish Dr., Walnut Creek. Get together with Mac and Performa users. Enjoyable SIG meetings. Call: Tom Bacon, (510)945-4548. [Exp. #138.]

International Macintosh Users Group (IMUG). Meetings: 3rd Thurs., 7:00 pm, Apple Computer, R&D Campus, 1 Infinite Loop, Cupertino. A forum for multilingual/multiscript computing. Call: Roger Sherman, (415)859-5146. [Exp. #140.]

Macs Of Marin. Meetings: last Wed., 7:30 pm, Corte Madera Rec. Center, 498 Tamalpais Dr., Marin. Q&A 7:30, meeting 8:00, members free, nonmembers $5. Call: Richard, (415)485-5596. [Exp. #140.]

PAUG—Peninsula Apple User Group. Meetings: 3rd Thurs., 6:30 pm, Computer Attic, 2750 El Camino Real, Redwood City. Beginners and advanced, question and answer, new product demos, public domain software. Call: Ted Wagner, (415)345-0751. [Exp. #140.]

P.I.E. Macintosh Special Interest Group. Meetings: 2nd Thurs., 7:15 pm, Lynbrook High School, Rm. 32, 1280 Johnson Ave. (btw. Bolinger & Prospect), San Jose. Call: Mickey Schumacher, (408)993-9363. [Exp. #139.]

San Leandro Apple Eaters Users Group (MUG). Meetings: 1st Thurs., 7:30 pm,

BEST PRICE & QUALITY IN TOWN! (408)734-9100

TOP DATA MONTHLY SPECIALS

SYSTEM	M/B +CPU	BASIC SYSTEM	BASIC SYS 170MB HDD 14" MONO	BASIC SYS 170MB HDD 14" MONO VGA	BASIC SYS 170MB HDD 14" SVGA	BASIC SYS+4MB 170MB HDD 14" SVGA	BASIC SYS+4MB 400MB HDD 14" SVGA	BASIC SYS+4MB 540MB HDD 14" SVGA	BASIC SYS+8MB 1GB HDD 14" SVGA
Pentium 100C PCI W/Enh IDE & IO	819	979*	1,219	1,259	1,379	1,489	1,549	1,629	1,989
Pentium 90C PCI W/Enh IDE & IO	669	829*	1,069	1,109	1,229	1,339	1,399	1,479	1,839
Pentium 90C PCI/VLB	699	859*	1,099	1,139	1,259	1,369	1,429	1,509	1,869
Nx586-P90/256C VLB	659	819*	1,059	1,099	1,219	1,329	1,389	1,469	1,829
Pentium-75C PCI	559	719*	959	999	1,119	1,229	1,289	1,369	1,729
Pentium 66C PCI W/Enh IDE & IO	499	659*	899	939	1,059	1,169	1,229	1,309	1,669
486DX4-100C PCI W/Enh IDE & IO	339	499	739	779	899	1,009	1,069	1,149	1,509
486DX4-100C VLB	279	359	679	719	839	949	1,009	1,089	1,449
486DX2-80C VLB	219	379	619	659	779	889	949	1,029	1,389
486DX2-66C VLB	179	339	579	619	739	849	909	989	1,349
486DX50C VLB	199	359	599	639	759	869	929	1,009	1,369
486DX40C VLB	159	319	559	599	719	829	889	969	1,329
486SX2-80C VLB	179	339	579	619	739	849	909	989	1,349
486SX2-66C VLB	159	319	559	599	719	829	889	969	1,329
486SX33C VLB	129	289	529	569	689	799	859	939	1,299
486DLC-40C VLB 87DX40 Inc'd	149	309	549	589	709	819	879	959	1,319
386DX40C VLB [illegible]	79	239	479	519	639	749	809	889	1,249
486DX2-66C ISA	169	329	569	609	729	839	899	979	1,339
486DX50C ISA	189	359	599	639	759	869	929	1,009	1,369
486DX2-50C ISA	159	319	559	599	719	829	889	969	1,329
486DX40C ISA	149	309	549	589	709	819	879	959	1,319
486SX2-66C ISA	149	309	549	589	709	819	879	959	1,319
486SX33C ISA	119	279	519	559	679	789	849	929	1,289
486SLC33 ISA SLC40 ADD$15	89	249	489	529	649	759	819	899	1,259
386SX40 ISA SX25 LESS$10	59	219	459	499	619	729	789	869	1,229

BASIC SYSTEM: MB W/CPU, 1MB MEMORY, SUPER IDE, 1.44MB FD, MINI TOWER W/230W PS & KEYBOARD.

MONITORS

ACER
- 14" 34T 1024NI .28 VESA/EPA...239
- 15" 56L 1280NI .28 VESA/EPA...349
- 17" 76i 1280NI .27 VESA/EPA....649

CTX
- 1451/1562/1765GM........229/329/659

KFC
- 14" .39I/.28I/.28NI...........189/219/229
- 15" 1511/1507w/digital 309/359

MAG
- 15", MX/DF15F.....................459/379
- 17", MS/MX/DS 17F........899/849/679

NANAO
- 15", F340IW, 1024X768 72Hz..... 639
- 17", F550IW, 1280X1024 .28.......929
- 17", T560IW/T560I...........1,159/1,389
- 20", T660I/T220................1,835/1989
- F560IW/F760IW...............1199/1,899

NEC
- XE15/17/21..................529/949/1989
- XP15/17/21..................679/1249/2499

SONY
- 15SF1/17SF1/20SE1......439/889/1879

VIEWSONIC
- 15", 15/15E/15EX............429/319/339
- 17", 17/17E/17G.............799/699/729
- 20", 20/20G.......................1459/1359
- 21", 21..1699

VIDEO CARDS

- SVGA -256K/512K/1MB........... 29/49/69
- S3-805 1MB VLB/PCI..................89/119
- TRIDENT 9440 1MB VLB............76/116

CIRRUS LOGIC
- 5428 1MB/2MB VLB.....................89/149
- 5434 1MB/2MB PCI...................119/179

DIAMOND
- ***SpeedStar*** PRO 1MB/64..........99/129
- ***Stealth***
  - 24/32 1mb/32 2mb.............129/169/219
  - 64 DRAM 1MB/2MB 139/179
  - 64 VRAM 2MB/4MB...................289/429
- ***Viper SE*** 2MB/4MB VRAM.......379/509

ORCHID
- KELVIN 64 1MB/2MB PCI/VLB.139/179
- KELVIN EZ 1MB PCI/VLB................109

TSENG LAB
- ET4000W32 1MB ISA/VLB.........89/129
- ET4000W32P 2MB PCI...................179

NOTEBOOKS

	486SX-66	486DX-80	486DX-100
MONO	$1,349	$1,419	$1,499
COLOR	$1,789	$1,859	$1,959

Large Screen,1MBVideoMemory,4MB RAM 250MB HD,Trackball,1.44 FD,PCMCIAII.

NETWORKING

ARTISOFT STARTER KIT
- LANtastic AI 6.0 Operating System x2
- NE2000 Ethernet Card x2
- RG58 Coax Cable x1,
- For Windows/Dos...............................299

NETWARE LITE STARTER KIT
- Netware Lite Operating System x2
- NE2000 Ethernet Card x2
- RG58 Coax Cable x1.........................129

PERSONAL NETWARE KIT............179

Windows for Workgroup Kit........199

NETWARE 2.20/3.12/4.01 PLS CALL

RISC PC

MIPS R4400 135MHz 64Bit RISCCPU
8KB Instruction cache/8KB data cache
512KB Secondary cache(upto 2Mb)
64-bit Fast Burst Video Bus(200MB/sec)
Integrated SCSI II contlr on 64-bit I/O bus
Built-in 32-bit Ethernet on 64-bit I/O bus
Five ISA expansion slots for ISA adapter
Microsoft Windows NT Operating System
PS/2 Compable Bus Mouse
Run all your application software for PC

ONLY $2399

MULTIMEDIA

CD-ROM
- Mitsumi/Pana./Sony DS.......139/149/139
- Teac 4X AT-bus...................................229
- Sanyo/Chinon DS SCSI Int.........139/229
- Nec 3X(510)/Toshiba 4X SCSI Int.....319
- Mitsumi 4X IDE Int.............................219

CREATIVE LAB
- OMNI CD/GAME BLASTER......199/389
- DIGITAL SCHOOLHOUSE...............299
- EDUTAIMENT CD 16........................419
- DIGITALEDGE CD............................649
- ***Sound Blaster***
  - Value Edition/Pro Value Edition.....59/79
  - 16 Multi CD/w ASP.......................99/169
  - 16 SCSI-II/w ASP.......................139/189
  - 16 Basic Value Edition/AWE32....99/269

CONTROLLERS

- MFM CONTROLLER W/O cable...........39
- IDE 2FD/HD with 2S1P1G.....................16
- IDE Cache Controller(0K).......................69
- IDE VLB 2FD/2HD with 2S1P1G...........36
- IDE Co-exist work w/MFM, RLL etc.......39
- Promise 2300P E.IDE /4030VL-2...69/109
- Forex SCSI VLB Bus Master...............129
- Adaptec 1542CF ISA/2742 EISA..169/359
- Adaptec 2842VL/2940 PCI...........289/319

N
237
101
MATHILDA
WEDDELL
FAIR OAKS
LAWRENCE

TOP DATA

408-734-9100

Information/Int'l Call:	(408)734-9100
Service/Tech. Support:(M-F9-5)	(408)734-9343
Fax Orders:	(408)734-9340

574 Weddell Dr. #5, Sunnyvale, CA 94089
Hours: M-F 7am-6pm, Sat 10am-4pm(PST)

TERMS AND CONDITIONS

1. One year parts and labor warranty.
2. 30 days money back guarantee.
3. Knowledgeable and friendly sales rep. in service.
4. All products are non-returnable after 30 days.
5. Price and availability subject to change w/o notice.
6. Not responsible for typo.
7. Purchase orders are welcome & subject to approval.

USER GROUPS cont...

San Leandro High School, Rm. 204, 2200 Bancroft Ave., San Leandro. Call: Stan (510)351-3973 or Ed (510)651-8521. [Exp. #140.]

Software Forum (formerly SEF) Macintosh SIG. Meetings: 3rd Tues., 7:00 pm, Apple Computer, R&D Bldg. 4, 4 Infinite Loop, Cupertino. $10. Call: Jeff Cherniss, (408)358-5150. [Exp. #141.]

SMUG (Stanford Palo Alto Macintosh User's Group). Meetings: 1st Mon., 7:00 pm, Syntex Conference Center, 3401 Hillview Ave., Palo Alto. Call: (415)328-4933. [Exp. #137.]

SPC Apple User Group. Meetings: 2nd Tues., 6:45 pm, CompUSA, New Park Mall, Newark (I-880 exit west on Steveson or Morey). The Society for Prevention of Cruelty to Apple Computers Users Group supports all Apple and Macintosh computers. Call: Dean Fearn, (510)881-9160. [Exp. #141.]

MARKETING

Software Forum (formerly SEF) Marketing SIG. Meetings: 4th Thurs., 7:00 pm, Cubberley Community Center, Rm. H-1, 4000 Middlefield Rd., Palo Alto. $10. Call: Bill Ryan, (415)615-7906. [Exp. #141.]

MULTIMEDIA

Joe's Digital Diner. Meetings: every other week, 5:30 interactive happy hour, 7:00 pm dinner, 8:00 pm showcase, 3435 Army St., Ste. 222 (at Valencia), San Francisco. An evening mixing home cooking, six multimedia stations, and a special presentation on new media, Internet, etc. Call: (415)824-9394. [Exp. #137.]

Macromedia User Group. Meetings: 1st Tues., 6:00 pm, 600 Townsend St. at 7th, San Francisco. For multimedia developers of all levels who use Macromedia products. $5. Call: (415) 252-2295. [Exp. #141.]

Software Forum (formerly SEF) Multimedia SIG. Meetings: 1st Thurs., 7:00 pm, Center for Software Development, 111 W. St. John St., Suite 200, San Jose. $10. Call: Dave McCutcheon and Charlie Pfefferkorn, (510)438-9565. [Exp. #141.]

NETWORKING

Apple Network Manager's Association. Meetings: 3rd Thurs., 5:30 pm, Syntex Laboratories, Palo Alto. A forum for discussing problems and solutions associated with managing mixed environments with AppleTalk networks. Call: Bill Woodcock, (510)843-6369, email *woody@zocalo.com* for directions. [Exp. #137.]

BMUG Networking SIG. Meetings: 4th Tues., 7:00 pm, BMUG office, 2055 Center St., Berkeley. Call: James, (510)233-7151. [Exp. #137.]

Software Forum (formerly SEF) Client/Server SIG. Meetings: 4th Tues., 7:00 pm, Cubberly Community Ctr., Rm. H-1, 4000 Middlefield Rd., Palo Alto. $10. Call: Patrick O'Brien, (415)726-4664. [Exp. #141.]

NOVELL

Novell User Group Of Monterey. Meetings: 3rd Thurs., 40 Ragsdale Dr. in Ryan Ranch off Hwy 68. Call: (408)645-2475. [Exp. #140.]

OS/2

OS/2 Bay Area User Group. Meetings: 4th Mon., 7:30 pm, Stanford Linear Accelerator Center Auditorium, 2575 Sand Hill Rd., Menlo Park. For anyone interested in OS/2. Presentations, demonstrations, question and answer session. Call: (510)945-7565 ext. 611. [Exp. #138.]

PEN

Software Forum (formerly SEF) Mobile/Wireless Computing SIG. Meetings: 4th Wed., 7:00 pm, Cubberley Community Center, Rm. H-1, 4000 Middlefield Rd., Palo Alto. $10. Call: Dick Roistacher, (415)591-8236. [Exp. #141.]

Stanford Newton User Group. Meetings: 2nd & 4th Tues., 7:00 pm, Printer's Inc. Bookstore Cafe, 310 California Ave., Palo Alto. Call: Flash Sheridan, (415)462-9203 or *FlaSheridn@rahul.net* . [Exp. #139.]

PROGRAMMING LANGUAGES

BMUG Forth SIG. Meetings: 2nd Sat., 12:00 pm, BMUG office, 2055 Center St., Berkeley. Forth for beginners, 12 noon; introductions, 1:00 pm; talks and demos 1:30–5:00 pm. Call: Leonard, (510)376-5241. [Exp. #137.]

BMUG Programmers' SIG. Meetings: alternate Weds., 7:00 pm, BMUG office, 2055 Center St., Berkeley. Mac Toolbox, C, and Pascal. Call: (510)549-BMUG. [Exp. #137.]

Software Forum (formerly SEF) C/C++ SIG. Meetings: 4th Fri., 6:15 pm, UC Santa Cruz Extension, Oxford Business Park, 3120 De La Cruz Blvd. (Trimble at 101), Santa Clara. $10. Call: Marian Corcoran, (408)973-1662. [Exp. #141.]

Software Forum (formerly SEF) Visual BASIC SIG. Meetings: 2nd Thurs., 7:00 pm, Cubberley Community Center, 4000 Middlefield Rd., Rm. H-1, Palo Alto. Free tutorial 6:00 pm. $10. Call: Deborah Kurata, (510)426-9411. [Exp. #141.]

Silicon Valley Forth Interest Group. Meetings: 4th Sat., 10:00 am–5:00 pm, 230 Lincoln Centre Dr., Foster City. Call: Dr. C.H. Ting, (415)638-5669 (w), 571-7639 (h). [Exp. #140.]

PROJECT MANAGEMENT

Microsoft Project Users Group. Meetings: 3rd Tues., alternates between San Jose and Foster City. Q&A, speakers, product demos, and other topics related to Microsoft Project and project management. Call: Jim Spiller, (707)425-2484. [Exp. #137.]

SILICON GRAPHICS

Bay Area Silicon Graphics Users Group—BASGUG. Meetings: 3rd Tues., 7:00 pm, SF Academy of Art College SGI Lab, 79 New Montgomery St. at Mission, San Francisco. Dedicated to providing advanced information and education for SGI systems. Call: Doug Cain, (415)346-6150. [Exp. #140.]

TEXAS INSTRUMENTS

TI-99/4A. Meetings: 2nd Sat., Oakland. Call: Fred, (510)530-8335. [Exp. #138.]

UNIX

AT&T UNIX Computer Users Group. Call: Thad Floryan, (415)961-5157. [Exp. #140.]

Software Forum (formerly SEF) UniForum Open Systems SIG. Meetings: 2nd Tues., 7:00 pm, DEC Auditorium, 130 Lytton Ave., Palo Alto. $10. Call: George Bosworth, (415)851-3304. [Exp. #141.]

VIRTUAL REALITY

Virtual Valley, The Silicon Valley And South Bay Virtual Reality Users' Group. Meetings: 1st Thurs., 7:00 pm, Round Table Pizza, private dining room, 1225 El Camino Real, Menlo Park. Networking, door prizes, job leads, information, fun, industry gossip. Call: Cleopatra Alfenito, (415)824-2536 or email: *virtual_valley_admin@gravity.com* . [Exp. #140.]

WINDOWS

BMUG Windows SIG. Meetings: 1st Tues., 6:30 pm, BMUG office, 2055 Center St., Berkeley. Call: Robin, (510)527-8993. [Exp. #137.]

Software Forum (formerly SEF) Windows SIG. Meetings: 1st Wed., 7:00 pm, Cubberley Community Center, Room H-1, 4000 Middlefield Rd., Palo Alto. $15. Call: Fran Finnegan, (415)288-4400. [Exp. #141.]

Windows OnLine
"Largest Library of Windows Shareware"
MEMBERS DOWNLOAD FREE
Unlimited INTERNET Email
World Wide Web Address
http://www.cris.com/WOL
More Information = info@wol.com
Call By Modem
510-736-8343

The Skull BBS
(415) 579-5544
20 GigaBytes Online!
16 Nodes! 28.8K Modems!
FREE TRIAL MEMBERSHIPS!!
Free Internet Access!
#1 In the Bay Area For Adult Graphics!
Proof of Age Required!!
Visa/MasterCard Accepted!

Is Your Listing Missing?

Free user group and association listings are limited to the group's name, meeting information, contact name and phone number, and a ten-word description. They will be **deleted at six-month intervals** to ensure timeliness and accuracy of information.

Free BBS listings are limited to the board's name, phone number, hours, baud rates, parameters, and a ten-word description. Please let our readers know if your BBS is free or requires a fee. Because we have an ongoing problem of boards shutting down without telling us, much to the annoyance of would-be callers and the new phone number's owner alike, we will **delete these listings after they've run three months.** The notice at the end of the listing—Exp. #xxx—refers to the last issue number it will appear in unless renewed.

You can update or renew your listings at any time. If yours is missing, send your listing information to:

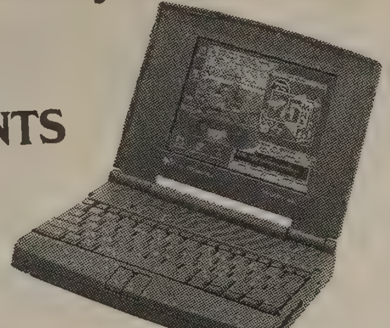
US Mail should go to: MicroTimes User Group, 3470 Buskirk Ave., Pleasant Hill, CA 94523. **Faxes** are welcome at (510)934-3958. **Email** can be sent to: JohnDownen@aol.com or MCI:MICROTIMES.

TI TM4000M 486 Multimedia-Ready Notebook

CPU : 486SX2/50, 486DX2/50
486DX4/75 Mhz or 486DX4/100
Active Color or Dual Scan Color
4MB RAM, Expandable to 20MB
345MB hard drive up
1.44MB FD
PCMCIA-1 Type III slot or 2 type II
16-bit sound card, audio in/ourt
EPP/ECP Parallel, 16550 Serial
3-5Hours NiMH battery
The Point internal pointing device
Fast SCSI II interface built-in
Ext. Support: 1024X768(256 color) non-interlaced. 1280x1024 (16 color)
Multimedia ----ready
Optional:
Portable CD-ROM Docking System for use with TravelMate 4000M Serial

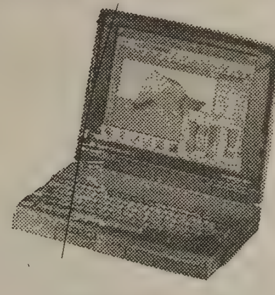
TEXAS INSTRUMENTS

NEW



486-DX2/50	DS color 4MB RAM 340MB HD	**$2099**
486-DX2/50	TFT color 4MB RAM 455MB HD	**$BEST**
486-DX4/75	DS color 4MB RAM 340MB HD	**$BEST**
486-DX4/75	TFT color 4MB RAM 340MB HD	**$BEST**
486-DX4/75	TFT color 4MB RAM 455MB HD	**$BEST**
486-DX4/100	TFT color 4MB RAM 540MB HD	**$BEST**

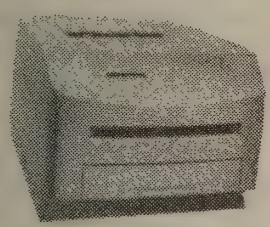
TI TravelMate 5000



- Pentium 75MHz 8MB exp. to 32MB
- PCI bus architecture, Plug and Play
- 10.4" TFT and Dual Scan color
- LCD supports 16.7 million color
- 1.44MB FD, 810MB hard disk
- Two batteries standard
- PCMCIA 1 tpye III or 2 Type I/II

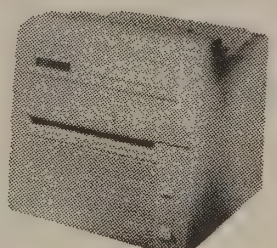
Call

MicroLaser 600 PS23



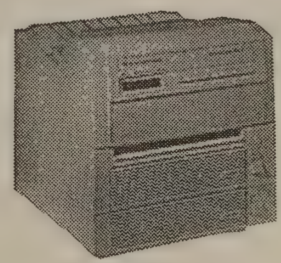
- 600DPI, 5ppm
- Adobe Postscript 2 & PCL5
- Mac and PC **$879**

TI MicroLaser Pro 600



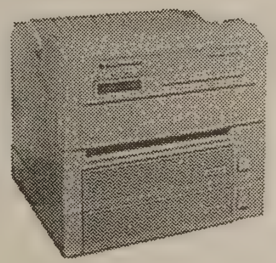
- RISC CPU, 600DPI, 8ppm
- Adobe Postscript 2 & PCL5
- Mac and PC **$1199**

TI Micro Laser Pro E 600



- RISC 20MHz, 600DPI, 12ppm
- Adobe Postscript 2 & PCL5
- Mac and PC **$1359**

TI Micro Laser Power Pro 600



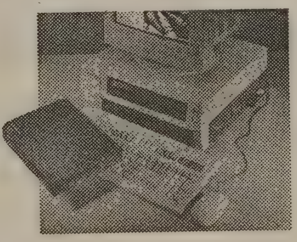
- RISC 25MHz, 600DPI, 12ppm
- Adobe Postscript 2 & PCL5
- Mac and PC **$1475** after rebate

TI Printer Accessories

- 1,2,4,8MB RAM Upgrade
- Ethernet 10BaseT Option
- TCP/IP 10BaseT Option
- SCSI interface
- Printer cable, Mac or PC
- Envelope, Legal/A4 Tray
- Universal Tray
- Toner Kit for Micor laser
- Toner Kit for micro writer
- Imaging Cartrdige (15000 prints)
- OPC Cartridge (30000 Prints)
- OPC for Micro Laser

TravelMate Desktop

Intelligent Docking Systems



$799 IN STOCK

TOSHIBA Notebook

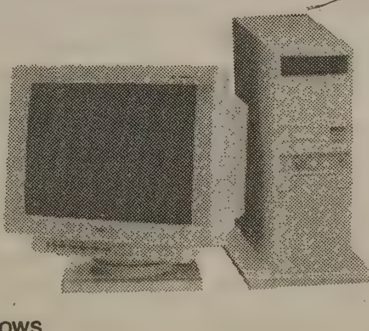
T1960 CS/CT	Best
T2100 CS/CT	Best
T2150 CS/CT	Best
T2400CS250MB	Best
T2400CT 250MB	Best
T2450CT 250MB	Best
T3400CT250MB	Best
T3600CT250MB	Best
T4850CT520MB	Best
T4900CT810MB	Best

PCMCIA CARD

Megahertz 14.4 X-Jack	Call
Xircom Ethernet 10BT	$229
Xicom Ethernet Combo	$499
Ministor 260MB type III	$395
New Media SCSI Adapter	$239
New Media Sound Blaster	$275
New Media 10Base-T	$195
New Media 14.4Fax/modem	$159
External CD ROM for Notebok	$319
TI CD ROM Dockng Station	$829
TI TM4000E 4MB, 16MB upgrade	
TI TM4000M 4,MB, 16MB upgrade	

McTek Pentium

Pentium 60/66/75/90mhz
Motherboard 3PCI 2VLB
8MB Exp. to 128MB
PCI HD controller, 2S/1P/1G
540MB Hard drive
PCI SVGA CARD w/1MB
15" SVGA monitor (non-int.)
1.2/1.44 Floppy Drive
Mid-Tower Case w/230W
101 Keyboard, DOS6.22, Windows, Microsoft mouse
Options:CD ROM (2x,3x,4x speed),16 bits sound card



60Mhz/66Mhz/75Mhz/90Mhz
$1699/$1799/$1959/$2199

McTek 486

486DX33/DX2-66 W/256 cache
Motherboard 3VLB
4MB Exp. to 128MB
VLB HD controller, 2S/1P/1G
540MB Hard drive
VLB SVGA CARD w/1MB
14" SVGA monitor (non-int.)
1.2/1.44 Floppy Drive
Double speed CD ROM drive
16 bits sound card
10 CD Titles
101 Keyboard, DOS6.22, Windows, Microsoft mouse

33MHz/66MHz
$1449/$1519

Other Notebook

AST Notebook All model	Call
DEC Notebook All model	Call
Epson Notebook All model	Call
IBM ThinkPad All model	Call
NEC Notebook all model	Call
Sharp 8700 & 8900	Call

Notebook harddisk upgrade

250/320/540/720/810MB
$289/355/450/559/699

McTek Systems, Inc.
1521 San Pablo Ave. Berkeley, CA 94702
Tel : (510) 525-5129

VISA HOURS MasterCard
M - F 10:00 - 6:00

VISA / MASTER ACCEPTED

ALL PRICES SUBJECT TO CHANGE

FINANCE, LEASING,
UPGRADE, REPAIR,
AVAILABLE

UNIX *continued from page 60*

is a software package created by and for the user community and distributed chiefly via anonymous ftp on the Internet. (Ftp to *ftp.cs.berkeley.edu* and look in the /ucb/tcl directory.)

In general appearance, the Tcl language looks very much like the command language of the UNIX shells. Like the language of the shells, Tcl is a scripting language: files containing Tcl commands can be passed to a Tcl interpreter for execution.

Tcl is also a small language: it consists of only about sixty commands. In addition, the Tcl interpreter itself takes up very little space. Tcl is also extensible—a reasonable programmer can add new commands to the existing language without a lot of effort.

The attraction of Tcl is not so much what the language does as where it does it. The Tcl interpreter is designed to be embedded in a compiled program. This effectively puts an interpreted language *inside* a compiled program and allows users to control the program with scripts containing Tcl commands.

While this is similar to the kind of control that can be achieved with shell scripts, an embedded interpreter can be given access to the internal workings of the program that contains it. Naturally, the programmer is still in control of what can and cannot be manipulated via Tcl.

A couple of things will have occurred to the shrewd reader. First, Tcl sounds like a tool for software developers and may be too esoteric to interest the casual UNIX user. How, you may well ask, will anyone who doesn't design and build new software benefit from Tcl?

In addition, even though Tcl can be embedded in *new* programs, that doesn't help provide a scripted interface for the programs that everyone's already using. Hell will probably freeze over before these programs are rewritten with the Tcl interpreter included in them.

Practical Tcl

It's premature to judge the long-term significance of Tcl, but there are two Tcl applications (Tk and Expect) that illustrate just how useful it can be for the average user and for existing software packages.

Tk is a Tcl application that provides an interpreted language for GUI programming resources that are ordinarily only accessible through a compiler. "Expect" is a Tcl application that lets a user compose scripts to run programs that are usually interactive.

Tk, which is also the work of John Ousterhout, is an extended version of Tcl that includes several dozen commands to control the basic elements of an X Windows GUI. (Tk is a separate package from Tcl, but the ftp sites that carry Tcl generally provide the Tk software distribution as well.)

Essentially, Tk is a scripting language for creating X-based graphical user interfaces. With Tk statements, you can create windows, buttons, scrollbars, and the like. Included with Tk is an interpreter named "wish" (window shell) that puts the GUI you've created on the screen. You can run wish "interactively," typing commands one at a time in a separate window, or you can pass an entire script to wish.

> **Ordinarily,** building a program with a GUI interface **requires a fair amount** of specialized knowledge about the library of routines that come with **X Windows.** Tk cuts through a lot of this and brings at least the **rudiments of GUI** programming within reach of **anyone who can write** a shell script.

Now this is a boon to all humanity. Ordinarily, building a program with a GUI interface requires a fair amount of specialized knowledge about the library of routines that come with X Windows. Tk cuts through a lot of this and brings at least the rudiments of GUI programming within the reach of anyone who can write a shell script.

For example, a windowed version of the famous "Hello, world!" program can be written in three lines of Tk code. (For comparison, the C code for the "Hello, world" demo packaged with Motif is over 150 lines.) The Tk version looks like this:

```
#!/usr/local/bin/wish -f
button .b -text “Hello, world!” -command
exit
pack .b
```

The first line tells UNIX to use the "wish" program as the command interpreter for this script. The second line defines a button with the text "Hello, world." When selected, the button will exit, causing the window it is in to close. The third line presents the newly defined button to a geometry manager which arranges for the new button to be displayed on an X Windows desktop.

Don Libes's Expect program is a Tcl application that can be used to automate programs that don't have the Tcl interpreter built in. (Expect is also available via anonymous ftp at *ftp.cme.nist.gov*.)

The user creates a script that first tells Expect which program to start and then describes the dialog between the program and its user. This dialog is based on two commands ("send" and "expect") that have been added to the Tcl command set. The "expect" command waits for a particular prompt from the program being controlled. "Send" provides input for the controlled program. If necessary, the script can turn control over to an interactive user.

With careful scripting (using variables and regular expressions), Expect can respond to contingencies; the program being controlled by an Expect script need not run the same way every time. In addition, Expect can be used to facilitate two-way communications between programs (an improvement over the one-way communications that are provided by the UNIX "pipe" facility).

One particularly dramatic example of Expect's capabilities is chess.exp, a 70-line script that uses Expect to stage a chess game between two instances of the chess program that is included in many UNIX systems. (Chess.exp is one of the demo applications that comes with the Expect package.)

There is no shortage of sources of information for Tcl, Tk, and Expect. A general discussion of Tcl-related issues can be found in the comp.lang.tcl newsgroup. Larry Virden maintains the Tcl FAQ in conjunction with this group. The FAQ is available via anonymous ftp from:

ftp://ftp.aud.alcatel.com/tcl/docs

A comprehensive Tcl/Tk Web Page can be found at:

http://cuiwww.unige.ch/eao/www.TclTk.html

And of course, there are books. See especially: John K. Ousterhout, *Tcl and the Tk Tookit*, Addison-Wesley, 1994; and Don Libes, *Exploring Expect*, O'Reilly & Associates, 1995. ■

Copyright © 1995 by Bennett Falk. All rights reserved.

Lifetime Labor Warranty On All Computers

WHOLESALE To The PUBLIC!

Special Sale!

Intel Pentium 90MHz Motherboard with w/256K Cache, Enhanced PCI IDE & Fast I/O	$275
14,400/14,400 bps Fax/Modem with Voice	60
Diamond Stealth 64 PCI w/2MB DRAM	149
80 Watt Stereo Speakers	47

486DX2-66MHz SYSTEM BEST BUY

- AMD 486DX2-66MHz CPU
- Pentium Over Drive Ready
- 128K External Cache
- SIS 471 Chipset
- AMI BIOS
- 4MB RAM
- 270MB IDE Hard Drive
- 14" SVGA NI .28dp Green Monitor
- 1.44MB Floppy Drive
- 32-Bit VLB Multi IDE w/2S, 1P, 1G
- Mini Tower Case
- Mitsumi Keyboard
- 32 Bit VLB SVGA w/IMB
- 3 Master VLB
- CPU Cooling Fan
- CPU 486 DX4-100 Upgradable

$878

486DX4-100MHz PCI MULTIMEDIA SYSTEM

- 486DX4-100MHz CPU
- Pentium Over Drive Ready
- 4 PCI Slots
- 4-16 Bit ISA Slots
- 256K Cache
- 4MB High Speed RAM
- 270MB IDE Hard Drive
- 1.44 MB Teac Floppy Drive
- PCI SVGA Card w/1MB, Trident 9440
- 14" NI SVGA Monitor .28
- PCI IDE Controller + I/O
- Deluxe Desktop Case
- Mitsumi 101 Keyboard
- SONY 2X CD-ROM Drive
- Creative Labs Sound 16
- Speakers
- Free CD Title

$1168

PENTIUM 60MHz SYSTEM MULTIMEDIA SYSTEM

- Intel Pentium 60MHz CPU
- AMI Flash BIOS
- 256K Cache
- 4MB High Speed RAM
- 540MB IDE Hard Drive
- 1.44 MB Teac Floppy Drive
- PCI SVGA Card w/1MB
- 14" NI SVGA Monitor .28
- PCI Enhanced IDE + High Speed I/O
- Super Mini Tower Case
- Mitsumi 101 Keyboard
- 3 PCI Slots
- 5 16-Bit ISA Slots
- SONY 2X CD-ROM Drive
- Creative Labs Sound 16
- Speakers
- Free CD Title

$1348

PENTIUM 75MHz MULTIMEDIA SYSTEM

- Intel Pentium 75MHz CPU (90/100 MHz Upgradable)
- 256K Cache (1MB Upgradable)
- 4MB High Speed 72 Pin RAM
- 540MB IDE Hard Drive
- 1.44 MB Teac Floppy Drive
- PCI Windows Accelerator Card w/1MB
- 14" NI SVGA Monitor .28
- PCI Enhanced IDE + High Speed I/O
- 4 PCI Slots
- Super Mini Tower Case
- Mitsumi 101 Keyboard
- SONY 2X CD-ROM Drive
- Creative Labs Sound 16
- Speakers
- Free CD Title

$1488

PENTIUM 120MHz CAD WORKSTATION

- Intel Pentium 120MHz
- P55 Upgradable
- CPU Heat Sink + Cooling Fan
- Super Pentium Board w/256K Cache
- Intel Triton Chipset
- 1MB Cache Upgradable
- AMI Plug & Play Flash Bios
- 12MB RAM
- 1GB Hard Drive
- 1.44 Floppy Drive
- Diamond Stealth 64 w/4MB VRAM
- Hitachi 17" .26dp Super 17S Monitor
- 2X PCI Enhanced IDE
- FDC/2S/1P/1G Ports
- 4 PCI Bus Master Slots
- 4 ISA Slots
- Medium Tower Case w/250W UL Power
- Keytronic Keyboard
- Microsoft Mouse

$3649

BRAND NAME COMPONENTS AT GREAT PRICES

— BRAND NAME VIDEO GRAPHICS CARD —

ATI Mach 64 with 4MB VRAM, PCI or Vesa	$469
ATI Mach 64/2MB PCI or VESA	189
ATI Mach 32 with 1MB DRAM, PCI Local Bus	93
Diamond Stealth 64 with 1MB/2MB PCI or VLB	118/155
Diamond Stealth 64 PCI w/2MB VRAM	259
Diamond SpeedStar Pro SE 1MB	93
Matrox Impression Plus 2MB VRAM PCI	335
Number 9 GXE64 PCI/VLB 2MB	255
Number 9 GXE64 Pro PCI 2MB VRAM	350
Number 9 Imagine 128/1600 PCI 4MB VRAM	1079
Orchid Kelvin 64 w/1MB PCI	120
Trident 9440 PCI or VESA Local Bus w/1MB	73

— BRAND NAME CONTROLLERS —

Adaptec 2940W SCSI 3 Controller	$259
Adaptec 2940 SCSI Controller, PCI	199
Adaptec 2842 SCSI Controller, VESA	199
PCI Wide SCSI-3 NCR825	139
PCI SCSI Controller, NCR 810	59
PCI Enhanced IDE with I/O	29
PCI or VESA Enhanced IDE & Hi Speed I/O	39
Vesa Multi IDE-I/O	18
ISA Multi IDE-I/O	12

— BRAND NEW HARD DRIVES —

270MB Maxtor	$148
540MB Conner	178
730MB Western Digital	215
850MB Maxtor	239
1GB Western Digital	359
540MB Quantum Lightning SCSI	218
1GB Conner SCSI	489
2GB Quantum Atlas, 8ms, 7200 spin SCSI	899

—TAPE BACK-UPS—

Colorado 350MB Tape Backup, Internal	$179
Colorado 350MB Tape Backup, External	360
Conner 420MB Tape Backup	168

— FLOPPY DRIVES —

Teac 1.2 & 1.44 Dual	$89
Teac 1.2 & 1.4	76/Pair
Mitsumi 1.2 & 1.4	66/Pair

— SUPER VGA MONITORS —

14" 1024x768 .28 Non-Int Energy Star MPRII	$205
15" .28dp 1280x1024 NI Monitor	299
Hitachi 15" 1280x1024 .28 Green Non-Int	389
Hitachi 17" 1280x1024 .26 Non-Int	699
Hitachi CM2098 20" .28 dp 1600x1200	1519
Hitachi CM2198 21" .28 dp 1600x1200	1839
14" Mono	73
14" Mono VGA	88

— KEYBOARDS —

Mitsumi 101 Keyboard	$15
Mitsumi 101 Enhanced	23
MaxiSwitch Keyboard	26
Keytronic 101 Keyboard	25

— CASES —

Full Tower with 250W power	$83
Middle Tower with 230W	60
Desktop with 230W	42
Mini-tower with 230W	39
230W power supply	29

— CD-ROM & SOUND CARD —

Toshiba 4X Speed CD-ROM Drive	$185
Teac 4X CD-ROM Drive, 600kb, 195ms	169
New Sony CD-ROM Drive IDE, Double-Speed	105
New Mitsumi 4X IDE CD-ROM Drive	175
Panasonic 562, 320ms, 300kb	112
Creative Labs Sound Blaster 16 Basic	73
Sound Blaster 16 MCD (OEM)	83

—BEST SELLING CD TITLES—

Myst	$30
Sim City	19
Indiana Jones	16
Microsoft Encarta '95	35
Microsoft Dangerous Creature	16
Microsoft Works + Money	20
Microsoft Golf	16
Mega Race	16
Just Grandma & Me	16

— FAX/MODEMS, MOUSES, & LAN PRODUCTS —

14.400/14.400 BPS fax modem	$68
28.800 BPS Fax/Modem Int. v34.	135
PCI DEC EtherNet Bus Master	99
Microsoft Mouse	25

— MOTHERBOARDS w/o CPU —

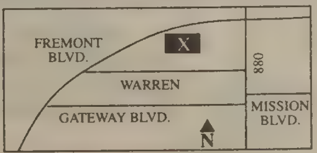
Dual Pentium 100 MHz EISA/PCI, Intel Neptune w/Pipelined 256K Cache	$599
Super Pentium 132 MHz, w/Intel Triton Chipset, EDO, Socket 7, 256K Cache, P55 CPU, Upgradable	299
Super Pentium 132 MHz, Viper Chipset, 256K Cache	209
486DX4-100, PCI SIS Chipset, 256K, w/Enhanced IDE	119
Pentium 66MHz SIS Chipset, 256K	149
486DX4-100, VLB, 256K Cache	89
Cache Upgrade to 512K	49
Cache Upgrade to 1MB	115
IBM 486SLC-66 w/CPU & Math Processor	139

ACME MICRO SYSTEMS

Since 1990

46500 Fremont Blvd. #716 • Fremont, CA 94538
(510) 226-6778 • FAX (510) 226-6773

Hours
M-F 9-6
Sat 11-4



Telecommuting *continued from page 58*

Online Library

In Oklahoma, Tulsa-based Wiltel is sponsoring a telecommunications library on the Internet. Reportedly, it contains lots of information for those who are interested in such things. Point your browser at: *http://www.wiltel.com/library/library.html*. I'd love to hear from any readers who can tell me what they've learned from this site.

Where Do You Get Your Connectivity?

A recent survey counts more than 6,300,000 current users of online services—nearly 40% more than last year! Although AOL has been spending heavily to get new members, it's difficult to believe they have single-handedly accounted for the big increase.

The survey ranks major "vendors" of online access as follows: CompuServe, America Online, and Prodigy are the big three, with Delphi, GEnie, and eWorld accounting for only a few percentage points of the total.

Many people tell me these figures are heavily inflated, because users routinely sign with more than one service at a time as a way of obtaining maximum connectivity to specialized resources, as well as to their clients, colleagues, and coworkers. Also, users are steadily switching to take advantage of promotional offers and other big discounts for the early months of a "new" account.

Tell me what services you use, and why? Assuming I get a meaningful number of responses, I'll report on the results of this "mini-survey" in the near future.

TAC Conference '95

The Telecommuting Advisory Council is having its annual conference this May 31 through June 2 in Long Beach, CA. As you probably know, TAC is an association of telecommuting consultants, experts, and corporate advocates who work hard to promote telecommuting for greater numbers of employers.

This conference, like last year's, will cover the latest technology, trends, and issues of concern to those interested in telecommuting.

For more information, contact TAC's conference manager at (602)759-7883. ■

Copyright © 1995 by Robert Moskowitz. All rights reserved.

Andersen Consulting has recently begun a corporate-wide strategic shift from an emphasis on downtown offices to a greater willingness to put their talent out in the field, nearer their clients and their own homes.

MULTI-CONNECTION MCT USA TECHNOLOGY

QUALITY YOU CAN COUNT ON!

5 Years Labor, 1 Year Parts Warranty FCC Class "B" Approved Systems

Pentium PCI Pro
- Pentium 100/90/75/66/60
- PCI VLB Bus w/256K Exp to 512K
- 8MB RAM exp. to 128MB
- 540MB IDE Fast Hard Drive
- 1.44MB Floppy Drive (1.2 Optional)
- PCI IDE Controller Card w/2S, 1P, 1G
- PCI SVGA Windows Accelerator w/1MB
- Deluxe Mini Case w/230 WPS
- Crystal Clear 15" .28dp 1280 NI Monitor, Digital Control
- Keytronic 101 SpaceSaver Keyboard
- MicroSoft Serial Mouse w/Pad
- MS DOS 6.22 & Windows 3.1

Pentium 100 PCI..."NEW" $1985
Pentium 90 PCI................$1839
Pentium 75 PCI....."NEW" $1570
Pentium 66 PCI $1659
Pentium 60 PCI $1620

Pentium VLB MultiMedia
- Pentium 100/90/75/66/60
- PCI VLB Bus w/256K Exp to 512K
- 8MB RAM exp. to 128MB
- 420MB IDE Fast Hard Drive
- 1.44MB Floppy Drive (1.2 Optional)
- VLB IDE Controller Card 2 w/2S, 1P, 1G
- VLB SVGA Windows Accelerator w/1MB
- Deluxe Mini Case w/230 WPS
- Crystal Clear 15" .28dp 1280 NI Monitor, Digital Control
- Keytronic 101 SpaceSaver Keyboard
- MicroSoft Serial Mouse w/Pad
- MS DOS 6.22 & Windows 3.1
- Complete Double Speed Sound Series Kit

Pentium 100 VLB ......NEW $2138
Pentium 90 VLB $1968
Pentium 75 VLB ....NEW $1725
Pentium 66/60 VLB ..$1699/1665

Best Value of 486
- 486DX2-66, DX40 CPU Intel, AMD
- VLB Bus w/256K Cache
- 4MB RAM
- 420MB IDE Drive
- 1.44MB Floppy (1.2MB optional)
- VLB IDE I/O w/2S, 1P, 1G
- VLB SVGA Window Acc w/1MB
- Deluxe Mini Case w/230 WPS
- Keytronic 101 SpaceSaver Keyboard
- Crystal Clear 14" .28dp Monitor
- Hi-Resolution Serial Mouse w/Pad
- MS DOS 6.22

486DX4-100 ....NEW $999
486DX2-80 ....NEW $949
486DX2-66 ....$929
486DX-40 ....$915

MultiMedia 486
- 486DX2-66, DX40 CPU Intel, AMD
- VLB Bus w/256K Cache
- 4MB RAM
- 420MB IDE Drive
- 1.44MB Floppy (1.2MB optional)
- VLB IDE I/O w/2S, 1P, 1G
- VLB SVGA Window Acc w/1MB
- Deluxe Mini Case w/230 WPS
- Keytronic 101 SpaceSaver Keyboard
- Crystal Clear 14" .28dp NI Monitor
- Hi-Resolution Serial Mouse
- MS DOS 6.22 & Windows 3.1

Complete Double Speed Sound Series Kit

486DX4-100 ....NEW $1199
486DX2-80 ....NEW $1179
486DX2-66 ....$1159
486DX-40 ....$1149

MULTIMEDIA UPGRADES

Quad Speed Sound Series
- Toshiba 3601B CD-ROM
- Sound Blaster 16 SCSI II
- Stereo Speakers
- Includes 5 CD Titles:

Double Speed Sound Series
- Acer 2X CD-ROM
- Acer 16- bit Sound Card
- Stereo Speakers
- Includes 5 CD Titles

-US Atlas-Chessmaster 3000-Compton's Interactive Encyclopedia-World Atlas-Mavis Beacon Teaches Typing

$439 $219

Government, Corporate, University, & VAR Inquiries and PO's Welcome

CD-ROM & CARD
Panasonic 562 ....$115
Teac CD 551 4X Speed 170
Toshiba 3601B 4X Speed SCSI......290
Sound Blaster 16 Value $85
Sound Blaster 16 Multi CD 88
Sound Blaster 16 Multi CD ASP 152

HARD DRIVES
850MB IDE $235
1.0 GB IDE 335
1.2 GB IDE 365

CALL FOR COMPLETE SYSTEM UPGRADES!

Now On Sale	Motherboard & CPU	Bare Bone	System
486Dx2-66 128K	$187	$315	$805
486DX2-50 128K	$162	$299	$786
486SX-33	$98	$225	$739

System:
- Motherboard + CPU
- 4MB RAM
- 420MB Hard Drive
- 1.44 Floppy Drive
- IDE I/O w/2S,1P,1G
- 512K VGA Card
- Tower Case
- 101 Keyboard & Mouse
- 14" .28dp NI Monitor

Bare Bone System:
- Motherboard & CPU
- 1MB RAM
- 1.44 Floppy Drive
- IDE I/O w/2S,1P,1G
- Tower Case

SINCE 1984

3518 ARDEN ROAD, HAYWARD, CA 94545 (510) 670-0636 FAX (510) 670-0790

Hours M-F 9-6 SAT 10-4 Pacific Time *Prices subject to change without notice. Not responsible for typographical errors.*

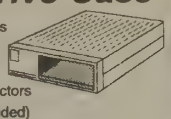
SJ ARDEN 880 92 EDEN LANDING CLAWITER 101 SF SAN MATEO BRIDGE

HSC Electronic Supply

Serving Silicon Valley since 1964!

...brings you a potpourri of high-tech goodies for the techno-tinkerer!
For thirty years we have been your source for Silicon Valley exotica!

SCSI Disk Drive Case



- Low-profile case for 5.25" drives
- Perfect for CD-ROM drives
- 9.5" x 2.5" x 10.5" overall size
- 50-pin SCSI daisy-chain connectors
- Uses IEC power cord (not included)
- Internal audio cable, RCA jacks on back
- Features 40W power supply, fan, SCSI ID switch

HSC# 15243 Low-Profile 5.25" Drive Case $39.95

Computer Parts Specials!

A. Teac half-height 5.25" 360K Floppy Drive
- Black Faceplate, Used, 30-day warranty

HSC# 14667 $14.95

B. Internal Fax/Modem Card, 2400data/9600fax
- New OEM (no box, software) with spec. sheet

HSC#15290 $9.95

C. 3.5" Floppy Drive Adapter Bracket for 5.25" bay
- Includes hardware, faceplate, connector adapters

HSC# 15124 $1.95

HP & Toshiba Cartridges

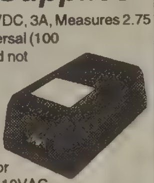
A. Hewlett Packard Deskjet & Deskjet Plus Font Cartridges
Order by HSC # plus letter: ◆ B, Prestige Elite ◆ ◆ C, Letter Gothic ◆ D, Times Roman 8 & 10 pt. ◆ ◆ E, Times Roman 12 pt. ◆ F, Times Roman 14pt. ◆ ◆ G, Helv. 8 & 10 pt. ◆ H, Helv. 12 pt. ◆ J, Helv. 14 pt. ◆ ◆ P, Times Roman ASCII ◆ Q, Helv. ASCII ◆

HSC# 97172 $5.00

B. Toshiba Laptop RAM Cartridges --1 Megabyte

HSC# 97171 $5.00

Handy Power Supplies



A) Switching power supply rated at 5VDC, 3A, Measures 2.75 x 3.25 x 5.25", IEC receptacle for universal (100 - 250VAC, 47 - 63 Hz) input, IEC cord not included, 6' Output cord with DIN plug New in box. **HSC#14996 $5.95**

B) Linear supply rated at 12VDC @ 1200 mA. Input is strapped for 240 VAC input, use as is with 110VAC for lower voltage output, or re-strap it for 110VAC use at 12VDC. Measures 2.5 x 4 x 6.5", IEC cord not included. **HSC# 14980 $5.95**

C) Standard 6' IEC power cord for use with above supplies, misc. colors & styles, used. **HSC# 80119 $.99**

D) Multi-output linear supply rated at 5VDC @ 600mA, +12VDC @ 250mA, -12VDC @ 250mA, 110VAC input, measures 2.5" x 3" x 4.75", generous 4' AC input cord, 5-pin DIN output cord, **HSC# 15137 $14.95**

E) Same as "D" above, only 5VDC @ 500mA, +12VDC @ 1A **HSC# 15139 $9.95**

Multimedia Speakers

- Two styles to choose from, both new in OEM box
- White plastic enclosures, grey grilles
- MSS-1000 has Volume control, Bass boost switch, uses 3 C-cells per side, measures 3.5" x 3.5" x 5"
- MSS-2000 has Volume control, Bass & Treble boost switches, uses 2 C-cells / side, measures 3.75" x 4" x 6"

MSS-1000	**HSC# 15127**	**Pair/ $6.95**
MSS-2000	**HSC# 15126**	**Pair/ $8.95**

External Floppy Drive

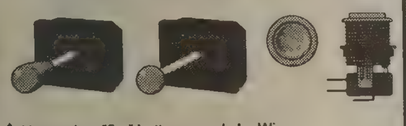
- 5.25" half-height 360K floppy drive, beige face
- Sturdy beige enclosure with power supply
- IEC Power cord, 37-pin D cable included
- Case size 6" x 2.25" x 12.5" (great for mounting other external drives, i.e. CD-ROM, etc.)
- New in box, with manual
- 90-day warranty

HSC# 15138 $24.95

Arcade Game Controls

- Heavy-duty switch-type joysticks, made by Wico
- New in box, 10A Microswitch contacts
- Mounting flange 3" x 3.5", stick with knob is 3.25" high
- Choice of red or black teardrop or red ball knobs

HSC# 15227 Red Teardrop HSC# 15228 Black Teardrop
HSC# 15230 Red Ball Knob Your choice $6.95



- Heavy-duty "fire" buttons, made by Wico
- New, 10A Microswitch contacts
- Mounting flange 1.25" dia., mounts in 1.125" hole
- Nicely dished button, choose from several colors:

HSC# 15218 Yellow, HSC# 15219 White
HSC# 15221 Green, HSC# 15222 Red
Your Choice $1.95 ea.

Network Cable Special

- Dual Workstation Installation Kit
- Two high-quality 10' RG-58 coax BNC cables
- Two BNC tee's
- Two BNC 50Ω terminators
- One BNC coupler
- Enough to cable two Thin-net workstations to the wall-plate distribution point

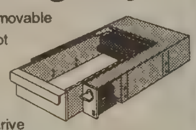
HSC# 14967 $9.95

Transaction Terminal

- Used VeriFone Tranz 240 terminals
- Vacuum-fluorescent alphanumeric 16-character readout
- 12-key keypad ◆ Z-80 proc. ◆ CMOS program EPROM
- Mag-stripe read-head (may have been disconnected)
- Communicates over an RS-485 line
- Needs 8.5 VAC adaptor
- Quantity discounts available

HSC# 14848 $19.95

IDE Docking Bay



- Makes 3.5" IDE Drives removable
- Fits in 5.25" half-height slot
- Plastic construction
- Remove drive for security
- New in box
- Power interlock protects drive
- Includes data & power connections

HSC# 15304 $39.95

CD-ROM Drive Deals!

- Just in...too close to ad deadline to sort!
- We will have several brands, speeds and interfaces
- Single, double and triple speed drives
- From $49.95 to $139.95
- Used, tested, guaranteed good, 90-day warranty
- Proprietary and SCSI Interfaces

CALL FOR INFO.... $ave $$$!

New! QRP Kit Specials

- Popular QRP ham transceiver kits by Oak Hills Research
- 1.5 Watt (Sprint) & 3 Watt (Explorer) models
- 30, 40 Meter bands avail. for Sprint, 20, 30, 40 for Explorer
- 100% complete kits with chassis, knobs, etc.
- All coils prewound for assembly ease
- QRP Wattmeter kit WM-1 available for $79.95

Sprint Transceiver Kit	**$89.95**
Explorer Transceiver Kit	**$129.95**

Modem Madness...

- Hyundai external 2400 & 1200 bps modems
- New in box with telco cable, manual, power adaptor
- CCITT V.21(V.22/V.22bis for 2400), MNP-5 compatible
- 5" x 1.25" x 8.5" compact size, software included

HSC# 15179	**2400 bps External Modem**	**$17.50**
HSC# 15238	**1200 bps External Modem**	**$9.95**

- 1200 bps internal modem card, new with software

HSC# 15239 1200 bps Internal Modem $4.95

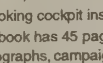
Multimedia Woofer!

- 60-watt air-suspension speaker with built-in crossover
- Mediavision Model 670-0020, used with CDPC system
- 6" speaker, 30 - 300 Hz freq. response, 40 Watts RMS
- Handsome black styling with removable black grille
- 9" x 7" x 17" cabinet, 1/4" phone plug input (cable incl.)
- New in box, 90-day warranty

HSC# 15178 $27.50

Laser Diode

- Toshiba TOLD-9200
- 3 to 4 mW at only 75 - 100mA of current!
- 670nm wavelength (visible red)
- Brand new prime
- Uncollimated, needs current regulation
- Application sheet with suggested circuit supplied



HSC# 15163 $17.95

Aerial Dogfight Game

- Lucasfilm's "Their Finest Hour -- The Battle of Britain"
- Historically accurate depiction of key WW II battle
- "Fly" a Spitfire, Stuka or one of six other fighter planes
- Realistic-looking cockpit instrument panel on screen
- Instruction book has 45 page history of the war with period photographs, campaign maps, profiles and quotes
- Turn on a "cockpit camera" to record your battle
- IBM/DOS,EGA/VGA, AdLib compatible.

HSC#14694 $9.95

HiFi Speaker Special!

- 40W Max, 20W RMS Woofer, 4Ω
- 5.5" dia. mounting, 1.7 lb. overall weight
- Black Injection-molded Graphite Cone
- Foam Suspension, Plastic Trim Ring
- Two-way Crossover Network with connection panel from same speaker system, freq. unknown

5.5" Woofer, new	**HSC# 15295**	**$9.95**
Crossover, new	**HSC# 15296**	**$3.95**

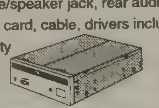
WORM-drive Project

- Maxoptix RXT800S internal full-height 5.25" drive
- 800 MB Write Once, Read Many (WORM) Optical Drive
- Customer returns, some work, some don't...
- As-is, no returns or exchanges...perfect for experimenter
- SCSI Interface, we have no other info.
- Driver software available in Corel SCSI! package
- Sorry, we don't have media yet, but we're looking!

HSC# 15209 $19.00

CD-ROM Starter Kit!

- Sony CDU-535 internal CD-ROM Drive (uses caddies)
- Working drive pulled from multimedia systems
- Single-speed half-height drive, Sony 40-pin interface
- Front earphone/speaker jack, rear audio connection
- New controller card, cable, drivers included (no caddy)
- 90-day warranty



HSC# 15191 $49.95

Remote Control for your Computer!

Dealer Inquiries Invited!
FORTE COMMUNICATIONS

- Infrared Remote operates your computer from 50 feet
- Perfect for sales presentations, training, demonstrations
- Serial Interface (IBM version) or ADB (Mac version)
- Handheld remote is 7" x 2.5" x .5"
- Included software provides screen pointer for emphasis
- Keystroke mapping table can be customized, saved
- Roam the room, make eye contact with your audience
- Like using a TV set remote control (easy to set-up, use)

HSC# 15240	**IBM Remote Keyboard**	**$29.95**
HSC# 15241	**Mac Remote Keyboard**	**$39.95**

220V Printer Special!

- Citizen 120D+ 9-pin Dot-matrix printer, Parallel interface
- Narrow carriage, friction or tractor feed, tractor included
- 120 cps draft mode, 144 cps High-speed Elite
- Overall Size 3.5" x 14.5" x 9.5" (without tractor)
- 220VAC, British-style plug (big blades)
- Brand new in box, 90-day warranty
- Could be used with step-up transformer, inquire.

HSC# 15253 $69.95

Easy File Transfers!

- SmartSync Software by Nomadic Systems
- Provides easy way to keep multiple computers in synch
- Fast and efficient, transfers only the changes
- Works with modems, cables or diskettes
- Automatically updates multiple files, single and multi-user
- Prevents accidental overwrites, can remotely copy

HSC# 15305 $19.95

Back-up Tape Drive

- Summit Memory Systems "Express 120"
- 120 Megabyte internal tape-backup unit
- Bundled with Central Point Backup software
- Interfaces like a floppy drive (34-pin conn. on back)
- Brand new in box (includes AT mounting rails)
- DOS, Windows, Novell compatible
- 90-day warranty

HSC# 15246 $59.95

Halted specialties co. **HSC Electronic Supply**

Toll Free (Orders Only) 1-800-4 HALTED (1-800-442-5833)
For Internet-return e-mail, post mail to: *HSC-Info@hsc.cue.com*
3500 Ryder St., Santa Clara, CA 95051 (408) 732-1573
4837 Amber Ln., Sacramento, CA 95841 (916) 338-2545
6819 Redwood Dr., Cotati, CA 94931 (707) 792-2277

-or-
FAX your orders to:
(408) 732-6428

HSC now on Internet!

- Now you can request return e-mail from HSC!
- Simply send a posting to *HSC-Info@hsc.cue.com*
- Automatically receive an info package via return e-mail

To subscribe to our e-mail "Mailing list", send a posting to *HSC-server@hsc cue.com* with the single line message:
SUBSCRIBE HSCmail <full name>
You will get future unsolicited mailings. You can "Unsubscribe" at any time in the same manner.

HSC-Info@hsc.cue.com

Terms: Some quantities limited; all items subject to prior sale. **Minimum order: $10.00 plus shipping.** Orders under $20.00 subject to $2.00 handling fee, in addition to shipping. All orders shipped FOB Santa Clara, CA (this means you pay freight!) by UPS Surface (no P.O. Boxes) unless otherwise specified, in which case prevailing carrier rate plus $5.00 handling fee applies. Prepaid orders that don't include shipping charges will be shipped freight COD. There is a $4.75 UPS charge added to shipping charges for COD shipments. If you have questions about your order, please call Customer Service at (408) 732-1854 M-F 9AM to 5PM PST.

Smart People Choose The Best Value

120MHZ PENTIUM SUPER CAD SYSTEM

- MADE IN U.S.A.
- Intel Triton Chipset
- Super Green Pentium
- 256K External Cache
- 4PCI Bus-Master Slots
- 16MB High Speed 72 Pin RAM
- 1.44 Floppy Drive
- 850MB Hard Drive
- Enhanced IDE Controller
- Quad Speed CD-ROM
- ATI Win Turbo 64 bit PCI w/2MB VRAM
- ACER 17" SVGA Non-Interlaced Monitor 76Hz Refresh
- Super Tower w/3 cooling fans
- Microsoft Ergonomic Mouse
- Keytronic Keyboard
- MS-DOS 6.22 & Windows 3.11

$3599

Multimedia Upgrade Kit Add $199

COMPUTER SHOPPER
1995 Best Buy
Windows
WorkStation

PENTIUM 90MHZ

- Intel Pentium CPU
- 256K External Cache Expandable to 512K
- 4PCI/1VLB Bus-Master Slot, 4 ISA Slot
- 8MB RAM Expandable to 128MB
- 530MB SCSI Hard Drive
- 1.44 Floppy Drive
- Adaptec PCI SCSI Controller
- Diamond Stealth 64 w/1MB Expandable to 2MB
- Magnavox 15" SVGA Monitor, .28dp
- High Speed I/O w/16550 Chip
- Deluxe Medium Tower Case
- Keytronic 101 Keyboard
- MS-DOS 6.22 & Windows 3.11

$1999

Multimedia Upgrade Kit Add $199

75MHz PENTIUM MULTIMEDIA SYSTEM

- Intel Pentium 75MHz CPU
- 256K External Cache
- 8MB High Speed 72 Pin RAM
- 540MB IDE Hard Drive
- PCI SVGA w/1MB
- PCI IDE w/16550 I/O
- 1.44 Floppy Drive
- Quad-Speed CD-ROM
- 16-Bit Stereo Sound Card
- 160 Watt Stereo Speakers
- 6 Titles CD Bundle
- 14" SVGA Non-Interlaced .28dp
- Deluxe Mini-Tower
- Mitsumi 101 Keyboard
- MS Compatible Mouse w/Pad
- MS-DOS 6.22 & Windows 3.11

$1799

486DX4-100MHz CAD BEST BUY

- AMD 80486DX4-100MHz CPU
- PCI Motherboard w/ZIF
- Pentium Overdrive Ready
- 256 External Cache
- 8MB High Speed RAM
- 1.44 Floppy Drive
- 540MB IDE Hard Drive
- IDE w/2S/1P/1G w/16550 Chip
- Diamond Stealth 64 PCI w/1MB
- SONY 15SF 15" SVGA .25dp
- Deluxe Mini Tower Case
- Microsoft Ergonomic Mouse
- Keytronic Keyboard
- MS-DOS 6.22 & Windows 3.11

$1599

Multimedia Upgrade Kit Add $199

NETWORKING

Novell 2 Station Starter Kit	$139
LANtastic 2 Station Starter Kit	$269

Including:

- 2 copies of Novell Lite or LANtastic
- 2NE2000 16 bit Ethernet Adapters
- 2-50 Ohm Cable Terminators
- 1-25 foot cable

Novell Additional Users	$79
LANtastic Additional Users	$139

ETHERNET CARDS

16 Bit NE2000	$38
16 Bit NE 2000TP	$38
3COM 3C509 Coax/5Pack	$116/468
3COM 3C509 TP/5Pack	$116/448
3COM 3C509 Combo/5Pack	$136/528
Intel EtherExpress 16	$109
SMC Elite Plus 16	$149
SMC Elite Ultra 16	$119
8 Port Concentrator	$119
16 Port Concentrator	$358

NETWORK SOFTWARE

LANtastic AI/6.0 (Win)	$89
Novell Personal Netware	$69
Novell Version 3.12	
5/10 User	$589/1359
25/50 User	$1925/2699
Novell Version 4.01	
5/10 User CD-ROM	$795/1555
25/50 User CD-ROM	$2195/2725
100 User CD-ROM	$4355

MODEMS/FAX

14.4 Fax/Modem Int	$78
Practical Peripherals	
14.4 Fax/Modem Ext.	$158
28.8 Fax/Modem v.34/Int.	$199
Hayes	
Optima 14.4 Fax/Modem Ext (PC)	$380
Optima 14.4 Fax/Modem Ext (MAC)	$450

MONITORS

SONY®

15SF	15"	1280x1024	.25dp	$399
17SF	17"	1280x1028	.25dp	$809

NANAO®

F340W	15"	1280X1024	.28dp	$499
F2-17	17"	1280x1024	.28dp	$859
F2-17EX	17"	1600x1200	.26dp	$959
T2-17	17"	1600x1200	.25dp	$1259
T2-17TS	17"	1600x1200	.25dp	$999
F2-21	21"	1600x1200	.28dp	CALL

ViewSonic®

15EX	15"	1024x768	.28dpNI/LR	$328
17G	17"	1280x1024	.28dpNI/LR	$678
17	17"	1600x1280	.27dpNI/LR	$789

MAG

DX15F	15"	1280x1024	.28dp	$338
DX17FG	17"	1280x1024	.26dp	$605

NEC

4FGe	15"	1024x768	.28dp	$575
5FGp	17"	1280x1024	.28dp	$1095

ADI

4FG/P	15"	1280x1024	.28dp	$368
5EP	17"	1280x1024	.28dp	$628

Acer

34T	14"	1024x768	.28dp	$218
76i	17"	1280x1024	.28dp	$599

CTX

	14"	1024x768 NI	.28dp	$238
	15"	1024x768 NI	.28dp	$305

VIDEO CARDS

ATI TECHNOLOGIES INC.

Win Turbo 64 PCI 2MB VRAM	$258
Ultra Pro PCI 2MB VRAM	$218
Ultra Plus 1MB DRAM	$95

DIAMOND Computer Systems, Inc.

Stealth 64 PCI/VLB 1/2MB DRAM	$115/159
Stealth 64 PCI 2MB/4MB VRAM	$259/385
Viper VLB 2MB VRAM	$268

ORCHID

Kelvin 64 ISA 1MB DRAM	$138
Kelvin 64 VLB/PCI 1MB VRAM	$128
Kelvin 64 VLB/PCI 2MB DRAM	$178

MOTHERBOARDS W/O CPU

Pentium-100/256C Intel Triton USA	$299
Intel Pentium-90/256C PCI	$308
Pentium-90/256C VLB PCI USA w/EIDE	$238
Pentium-90/256C PCI	$169
Pentium 60/256C PCI	$168
486DX4-100/256C VLB/PCI	$128
486DX4-100/256C VLB	$99
486DX2-80C VLB	$68
486DX2-66 VLB	$68

BRAND NEW DRIVES

420MB 12ms IDE	$159
540MB 13ms IDE	$179
730MB 11ms IDE	$239
1.0GB 10ms IDE	$369
540MB 9.3ms SCSI	$249
1.0GB 12ms SCSI	$475
2.0GB 10ms SCSI	$859
3.0GB 12ms SCSI	$1699
9.0GB SCSI	CALL
Teac 1.2/1.44 Floppy Drive	$45/35
3.5" DS/HD 25 Diskettes Pack	$8.99

CONTROLLER CARDS

Adaptec 1542 SCSI ISA Controller	$169
Adaptec 1542CF SCSI w/Kit	$229
Adaptec 2842 VLB SCSI w/Kit	$238
Adaptec 2940 PCI SCSI w/Kit	$199
VLB IDE (2S/1P/1G)	$28
AT I/O (2S/1P/1G)	$15
Enhanced I/O (2S/1P/1G) w/16550 Chip	$48

KEYBOARDS

Mitsumi 101 Enhanced	$13
Keytronic (Quiet) Keyboard	$28
Focus 2001	$35
Fujitsu 101 Keyboard	$48
NorthGate Omni 101/102	$68
NorthGate Omni Ultra	$78
Microsoft Natural Keyboard	$85

MISCELLANEOUS

Microsoft Compatible Serial Mouse	$14
PS/2 Compatible Serial Mouse	$18
Microsoft Serial Mouse w/system	$38
Logitech Serial/Mouse Mouseman	$68
Logitech Trackman	$89

WORLD-NET
MICROSYSTEMS, INC.

Systems At WORLD-NET MICRO SYSTEMS

75MHZ PENTIUM MONTHLY SPECIAL

- Intel Pentium 75MHz CPU
- 256K External Cache
- 8MB High Speed 72 Pin RAM
- 420MB IDE Hard Drive
- PCI Windows Accelerator
- 1.44 Floppy Drive
- 14" Non-Interlace SVGA .28
- PCI Enhanced IDE w/Hi-Speed I/O
- Mitsumi 101 Keyboard
- Deluxe Mini Tower Case
- 200W Power Supply

$1299

Multimedia Upgrade Kit
Add $199

486DX4-100MHZ

- PCI/VLB Motherboard w/ZIF
- Pentium Overdrive Ready
- AMD 80486DX4-100MHz CPU
- 256K External Cache
- 4MB RAM
- 420MB Hard Drive
- 1.44 Floppy Drive
- PCI Enhanced IDE
- PCI Windows Accelerator w/1MB
- 14" SVGA Non-Interlaced Monitor
- 2S/1P/1G w/16550 Chip
- Mitsumi 101 Keyboard
- Deluxe Mini-Tower Case

$999

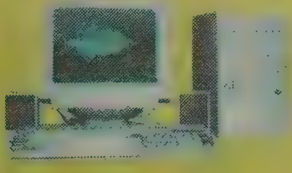
Multimedia Upgrade Kit
Add $199

486DX2-80MHZ BEST BUY

- 32 Bit VLB Motherboard w/ZIF
- Pentium Overdrive Ready
- AMD 80486DX2-80MHz CPU
- 256K External Cache
- 4MB RAM
- 420MB Hard Drive
- 1.44 Floppy Drive
- 32 Bit Super VLB IDE
- 32 Bit VLB Windows Accelerator w/1MB
- 14" SVGA Non-Interlaced Monitor .28dp
- 2S/1P/1G
- Mitsumi 101 Keyboard
- Deluxe Mini-Tower Case

$899

Multimedia Upgrade Kit
Add $199



486DX2-80MHz MULTIMEDIA SYSTEM

- 32 Bit VLB Motherboard w/ZIF
- Pentium Overdrive Ready
- 80486DX2-80MHz CPU
- Multisession 2X CD-ROM
- Double Speed CD-ROM
- 16 Bit Stereo Sound Card
- 160 Watt Stereo Speakers
- 4MB RAM
- 1.44 Floppy Drive
- 420MB Hard Drive
- 32 Bit VLB SVGA w/1MB
- IDE w/2S/1P/1G
- Free Mouse w/Pad
- 14" SVGA Non-Interlaced Monitor .28dp
- Mitsumi 101 Keyboard
- Deluxe Mini-Tower Case

$1099

TEAC 4X SPEED CD-ROM KIT

- Teac 55A Quad-Speed CD-ROM
- Sound Blaster 16 Bit Stereo
- A Pair of Stereo Speakers
- Free Compton's Encyclopedia

$269

TOSHIBA 4X SPEED CD-ROM KIT

- Toshiba 3501B Quad-Speed CD-ROM
- Sound Blaster 16 SCSI
- A Pair of Stereo Speakers
- Free Compton's Encyclopedia

$399

16 BIT MULTIMEDIA UPGRADE KIT

- Double Speed CD-ROM
- 16 Bit Stereo Sound Card
- A Pair of Stereo Speakers
- Free 6 CD Titles (Includes: Grolier Encyclopedia, San Diego Zoo/Animals, US Atlas, World Atlas, Chess Master 400, Mavis Beacon Teaches Typing)

$199

MITSUMI 4X SPEED CD-ROM KIT

- Mitsumi FX400 Quad-Speed CD-ROM
- 16-Bit Stereo Sound Card
- Pair of Stereo Speakers
- Free Compton's Encyclopedia

$259

CD-ROM

Panasonic CR-562B 2x-Speed	$119
Philips IDE 2x-Speed	$99
Teac 55A 4x-Speed	$169
Mitsumi FX400 4X Speed IDE	$179
Toshiba 3501B (SCSI) 4x-Speed	$299

MULTIMEDIA KIT

CREATIVE
CREATIVE LABS, INC.

Sound Blaster 16 Value	$99
Sound Blaster 16 MCD (w/system)	$89
Sound Blaster 16 MCD/ASP	$129
Sound Blaster 16 SCSI-2 (w/system)	$108
Sound Blaster 16 SCSI-2/ASP	$179
SB Discovery CD Upgrade Kit	$219
World-Net CD-16 Kit	$199
160 Watt Stereo Speaker	$58
100 Watt Stereo Speaker	$48
Labtec CS-800 Speakers	$39
JS 224 Watt Stereo Speaker	$158
Joystick	$9

TOP 6 CD SALE

Lion King	.29
Myst	.39
Oregon Trail	.49
Wing Commander III	.59
King Quest 7	.39
Aces Over Europe	.39

CD TITLES

Arthur's Birthday	.29
Arthur's Teacher Trouble (TOP 10 BEST SALE)	.16
Battle Chess Enhanced	.19
Carmen San Diego-Deluxe (TOP 10 BEST SALE)	.18
Chessmaster 4000/Turbo	.16
Family Doctor (3rd Edition)	.16
Hell Cab	.25
Harry & Haunted House	.29
Indiana Jones Fates of Atlantis (TOP 10 BEST SALE)	.19
Interactive Story time (vol. 1)	.9
Interactive Story time (vol. 2)	.12
Iron Helix (TOP 10 BEST SALE)	.18
Just Grandma And Me (TOP 10 BEST SALE)	.16
Kodak Photo CD Access	.12
Little Monster at School	.29
Mad Dog McCree (TOP 10 BEST SALE)	.16
Mad Dog McCree II	.19
Math Workshop	.29
Mayo Clinic Family Health Book	.18
Mega Race (Best Car Racing CD ROM)	.19
Nat'l Geographic Mammals	.18

CD TITLES

New Kids on the Block	.29
Outpost	.19
Play Room	.29
Playing w/Language-English	.19
Playing w/Language-French	.19
Playing w/Language-German	.19
Playing w/Language-Japanese	.19
Playing w/Language-Spanish	.19
Ruff's Bone	.29
San Diego Zoo/Animals	.12
Seventh Guest w/2CD (TOP 10 BEST SALE)	.23
Star War Chess	.18
Subwar 2050	.19
The Legend of Kyrandia (Book One)	.16
Tortoise & Hare	.29
U.S. History	.19
Who Killed Sam Rupert	.16
6 Title CD Bundle (Including NEW Grolier's Encyclopedia, San Diego Zoo - Animals, Chessmaster 4000, US Atlas, World Atlas, and Mavis Beacon Teaches Typing In 3 CDs)	.49

2 DAY SPECIAL SALE!

Every Saturday & Monday Only

Memory Modules

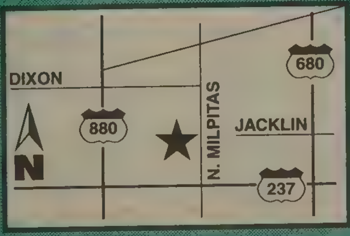
1x3-70ns 3 Chips 1MB Simm	$38
4x9-70ns 9 Chips 4MB Simm	.138
1x32-70ns 72 pin 4MB Simm	.148
1x36-70ns 72 pin 4MB Simm	.168
2x32-70ns 72 pin 8MB Simm	.299
2x36-70ns 72 pin 8MB Simm	.348
4x32-70ns 72 pin 16MB Simm	.488
4x36-70ns 72 pin 16MB Simm	.568

HP PRINTER

HP DeskJet 540	$283
HP DeskJet 560C	.463

WORLD-NET MICROSYSTEMS, INC.

1503 North Milpitas Blvd.
Milpitas, CA 95035



Terms and Conditions:

1. Lifetime Labor and One Year parts Warranty on all Computers.
2. Knowledgeable technical support engineers in service.
3. Prices and availability subject to change without notice.
4. Shipping, insurance and COD charges are extra and nonrefundable
5. Return shipping must be insured, prepaid and bearing an RMA# on the shipping label.
6. Defective items replaced or repaired at our discretion.
7. Not responsible for typos.
8. All returns subject to 15% restocking fee and cover only World-Net Microsystems brand computers; excludes peripherals and software. No refunds after 30 days.
9. Superior reputation for service, quality and value.
10. Purchase orders are welcomed and subject to approval.
11. Price reflects cash discounts.

Tel: (408) 263-8088

Fax: (408) 263-4588

BUSINESS HOURS:
MON-FRI 9:00-6:00 • SAT 10:30-4:00

Best Prices! Best Quality! Best Service!

CALL FOR UPDATED PRICES

LAITRON COMPUTER WEEKLY SPECIALS

PENTIUM 90

- Intel Pentium 90 CPU w/fan
- Asus P90 Mother Board
- 4 PCI / 4 ISA Slots
- 256K SIS Chipset
- 8MB 72 Pin RAM 70ns
- Teac 1.44 MB Floppy Drive
- PCI Enhanced IDE Controller
- High speed IO
- Quantum 540MB IDE HD
- Diamond Stealth 64 PCI w/1MB
- Acer 15" .28dp 1280X1024 Non-Int
- Keytronic 101-key Keyboard
- MS DOS 6.22
- Medium Tower Case
- 250-Watt Power Supply

$1749

PENTIUM 60

- Intel Pentium 60 CPU w/fan
- Micro Star P60 Mother Board
- 4 PCI / 4 ISA Slots
- AMI BIOS w/256K Cache
- 8MB RAM 70ns
- Teac 1.44 MB Floppy Drive
- PCI Enhance IDE Controller
- Hight Speed IO
- Quantum 540MB IDE HD
- Diamond Stealth 64 PCI w/1MB
- 14" .28dp 1024x768 Non-Int
- Keytronic 101-key Keyboard
- MS DOS 6.22
- Medium Tower Case
- 250-Watt Power Supply

$1479

486DX4-100

- MicroStar 3PCI w/PowerSaving
- Pentium Over Drive Ready
- AMD 486DX4-100 CPU w/Fan
- AMI BIOS w/256K Cache
- 4MB RAM 70ns 72pin
- Teac 1.44MB Floppy Drive
- PCI Enhanced IDE Controller
- High Speed I/O(2S1P)
- Quantum 540MB IDE HD
- 32 Bit PCI Video Card w/1MB
- 14" .28dp 1024X768 SVGA Non-Interlaced Monitor
- Mitsumi 101-key Keyboard
- MS DOS 6.22
- Mini Tower Case w/230w P.S.

$1099

486DX2-66 PCI

- MicroStar PCI w/PowerSaving
- Pentium Over Drive Ready
- 80486DX2-66 CPU w/fan
- AMI BIOS w/256K Cache
- 4MB RAM 70ns 72pin
- Teac 1.44 MB Floppy Drive
- 32 BIT EIDE w/2S/1P/1G(16550)
- Quanttum 420MB IDE HD
- 32 Bit PCI Video Card w/1MB
- 14" .28dp 1024X768 SVGA
- Mitsumi 101-key Keyboard
- MS DOS 6.22
- Mini Tower Case
- 230-Watt Power Supply

$979

COMPUTER / TELEPHONY INTEGRATION

Fax On Demand &Voice Processing System

Features:

1. Setup user ID/Password/Credit.
2. One Call & Call Back mode.
3. Area Code selection for Call Back mode restriction.
4. Log file to Review/Print transactions report for all the inquires.
5. "Bad Fax No" setup to prevent from sending Fax to specific telephone number.
6. Unimited Caller's Voice Message.
7. Tsr Program can be run in the background.
8. Automatic Update Documents.
9. Easy On-Line System Mangement.
10. Applicable for any industry

Functions:

1. 24 hours customer service hotline center
2. Fax-on-demand system
3. Fax MAilbox: Allow callers to retrieve their faxes infomation to the specified destination.
4. Voice Messaging Box-allow inquirers to leave detail message for follow-up action.
5. Multiple Language-allow callers using their native language to access the system.
6. Owner Definable InfoBox.

Demo Line: (408)321-9348

For more details, please call: *(408)988-5916*

MEMORY & CHIPS

1MBx3 SIMM 70/60ns	$36/$37
4MBx3 SIMM 70/60ns	$117/$119
1MBx36 SIMM 70ns/60ns	$163/$165
1MBX32 SIMM 70ns / 60ns	$149/$154
2MBx36 SIMM 70ns/60ns	$314/$324
2MBX32 SIMM 70ns/60ns	$290/$295
4MBx36 SIMM 70ns/60ns	$493/$513
4MBX32 SIMM 70ns / 60ns	$449/$459
Cyrix 387DX-40/33/25	$30
Intel Pentium 75/90/100	$343/$499/$699
Intel Pentium 60/66	$289/$309
Intel 486 DX4 100 / 75	$268/$220
Intel 486 DX2 66 / DX33	$189/$100
AMD 486 DX2 66 / DX2 80 / DX4 100	$129/$148/$189

CPUs & Memory....Please Call for New Daily Updated Prices

TAPE BACKUP

COLORADO	
FC-20 / TC-15 Tape Backup Controller	$65/$185
DJ-10 120MB / DJ-20 250MB	$99/$142
DJ-35C 350MB / DJ-25 750MB	$164/$260
PT-25 2GB Int. / PT-25 2GB Ext.	$920/$995
PT-50 4GB Int. / PT-50E 4GB Ext.	$995/1245
Trakker 250MB Ext.	$275
CONNER	
250MB / 420MB Int. w. Tape	$125/$167
4320RT 2.OGB Int.	$795
4324RP 4-8GB Int.	$859
3M DC2120 Tape	$13

MOTHERBOARDS W/CPU

AIR	
486DX2-66 / DX4-100 256K VLB (AMD)	$235/$328
486DX2-66 256K VLB w. IDE & IO (Intel)	$354
486DX4-100 256K PCI/VLB w. IDE & IO (AMD)	$400
Pentium 100 PCI/VLB/512K w. IDE & IO	*$1039*
ASUS	
86DX2-66 256K w. 2VLB (Intel)	$289
486DX2-66 256K PCI w. SCSI & IDE (AMD)	$359
486DX4-100 256K PCI / VLB w. IDE (AMD)	$339
Pentium 90 256K PCI w. EIDE & IO(Intel)	$719
Pentium 100 512K PCI w. EIDE & IO(16550)	*$949*
Dual Pentium 90 256K EISA/PCI w. 1 CPU	$1329
NEXGEN	
P90 256K 3VLB	$510
P80 256k 3VLB	*$410*
IBM	
SLC2-66 64K 2VLB w. Math	$129
INTEL	
Pentium 90 256K 3PCI w. IDE & IO (16550)	*$799*
Pentium 100 256K 3PCI w. IDE & IO (16550)	*$1040*
MICROSTAR	
486SX-25 / SX-33 128K 3VLB	$142/$165
486DX-33 128K 3VLB	$189
486DX2-66 / DX2-80 256K 3VLB (AMD)	*$235*
486DX4-100 256K 3VLB (AMD)	*$317*
486DX4-100 256K PCI w. IDE & IO (AMD)	*$365*
Pentium PCI 60 / 66 w IDE & IO (Intel)	$457/$487
Pentium 90 PCI/VLB 256K	*$754*
386DX-40/128K	$88

VIDEO CARDS

ATI	
Graphics Ultra Pro 2MB PCI / VLB VRAM	$211
Graphics Wonder 1MB ISA/VLB	$94
WIN BOOST 1MB/2MB DRAM VLB / PCI	$135/$174
WINTURBO 64 2MB/4MB VLB / PCI	$248/$440
CIRRUS LOGIC	
CL-GD5420 w/1MB	$58
CL-GD5424 / 5428 VLB w. 1MB	$60/$69
DIAMOND	
Speed Star SE 1MB ISA / (PCI/VLBI)	$83/$90
Stealth64 1MB / 2MB DRAM (PCI/VLB)	$111 /$154
Stealth VEDIO 2MB/4MBVRAM(PCI/VLB)	$261/$397
Viper SE 2MB (PCI/VLB)	$273
MATROX	
ULT2VH Ultima 2MB VRAM VLB	$430
Impression Plus 1600x1200	$387
PCI 2MB / 2MB PLUS VRAM	$330/$425
NUMBER 9	
Xe 64 1MB / 2MB (PCI/VLB)	$185/$235
Xe 64 Pro VRAM 2MB/4MB	$330/$499
ORCHID	
Kelvin 64 1MB / 2MB (PCI/VLB)	$116/$165
Fahrenheit 64 1MB / 2MB (PCI/VLB)	$126/$169
Fahrenheit 64 PRO 2MB VRAM (PCI/VLB)	$264
Fahrenheit 64 PRO 4MB VRAM (PCI/VLB)	$390
TRIDENT	
9000A 256K/512K	$31/$34
8900CL w/1MB	$54
9440 1MB VLB/PCI	$72/$79
Tseng lab W32 VLB 2MB (45 ns memory)	$135
S3 805 VLB 1MB/ S3 864 PCI 1MB	$65/$95

MONITORS

ACER	
17" 1280X1024 .27 DP	$589
15" 1024X768 .28 DP	$289
ADI	
4GP 15" .28dp 1280x1024	$365
CTX	
14" 1024x768 .28dp Non-Int	$219
15" 1024x768 .28dp Non-Int	$304
IDEK	
15" 1280X1024 .28 DP	*$375*
17" 1600X1280 .26 DP Non-Int	*$740*
21" 1600X1280 @ 72 HZ .30 DP	$1750
IMPRESSION	
3 14" 1024X768 .28dp full screen	$199
3 Plus 14" 1024 X 768 28dp NI full screen	$219
7 17" 1280X1024 .26 NI	*$569*
MAG	
15F DX no LED 15" 1280X1024 .28	$335
15F MX Flat, 15" 1280X1024 .28	$444
17F DX 17" 1280X1024 .26	$592
17F MXP Flat, 17" 1600X1280 .26	$890
21F MX	$1610
NANAO	
F340iW 15" Flat 1024 X 768 .28 NI	$540
F550i 17" 1280 X 1024 .28 NI	$765
F550iW 17" 1280 X 1024 .28 NI	$859
F560iW 17" 1280 X 1024 .26 NI	$1141
T560i 17" 1280 X 1024 .25 NI	$1370
F750i/F760iW/T660i	$1450/$1780/$1975
NEC	
XV15 15" 1024x768 .28 NI	$449
XE15 / XP15 / XE17 1024 X 768 NI	$522/$643/$942
XP17 17" / XE21 21" 1280 X 1024 .28 NI	$1182/$1885
XP21 1600X1200 .28 NI	$2315
SONY	
15SF 15" 1280 X 1024 .25	$403
17SF 17" 1280 X 1024 .25	$819
20SE1 20" 1280 X 1024 .30 NI	$1744
VIEWMAGIC	
15" 1280X1024 .28 NI w/Processor	*$285*
VIEWSONIC	
6E 14" 1024 X 768 .28 NI	$241
15ES 15" 1024X768 .28 NI	$325
15G 15" 1280 X 1024 .28 NI	$370
15 15" 1280X1024 .28 NI	$401
17G 17" 1280 X 1024 .28 NI	$682
17 17" .27 1600 X 1280 NI	$794
20G 20" .28 1600 X 1280 NI	$1210
21PS 21" 1600 X 1280 .26 NI	$1592
Monochrome 14" / Monochrome VGA 14"	$69/$84
SVGA 14" 39dp	$179

SCANNER

HP (Hewlett Packard)	
Scanjet IIIP Gray Scale / IICX Color	$465/$895
INFO PRODUCTS	
SF3GS Gray Scale / SF12C Color 600dpi	$220/$430
LOGITECH	
Scanman Easy Touch w. OCR	$167
Scanman 256 Gray Scale w. OCR	$150
Scanman Color w/OCR	$252

CONTROLLER CARDS

ADAPTEC	
1522 / 1522K	$68/$135
1542CF / 1542CFK SCSI	$169/$228
1742 / 2742A / 2742TK EISA SCSI	$190/$310/$330
2742 EISA Kit for 14 HD	$255
2842 VLB / 2940 PCI SCSI w.Kit	$207/$192
2940W Wide SCSI PCI w. Kit	$258
BUSLOGIC	
BT-445C VLB Fast SCSI-2 w. Kit 10mb/s	$192
BT-545C ISA Fast SCSI-2 w. Kit 10mb/s	$182
BT-747S EISA Fast SCSI-2 w. Kit 10mb/s	$299
BT-946C PCI Fast SCSI-2 w. Kit 10mb/s	$349
PROMISE	
DC-2300 Plus Enhance IDE w. 16550	$48
DC-4030 VLB IDE Cache w. 4HD	$95
IDE ISA / IDE VLB w. 2HD 2FD 2S 1P 1G	$11/$19
PCI IDE / NCR PCI SCSI	$26/$79

HARD & FLOPPY DRIVES

CORNER	
270MB 12ms IDE	$144
CFS-540A 540MB 14ms 32K IDE	*$17*
CFA-850A 850MB 12ms 256K IDE	*$23*
CFA-1275A 1.2GB 9.5ms 256K IDE	$379
CP-30350 340MB 12ms SCSI	$214
CP-30540 540MB 12ms SCSI	$259
CFP-2105S 2.1GB 9ms 256K SCS-2 Int.	*$929*
CFP-2105S 2.1GB 9ms 256K SCS Ext.	*$999*
MAXTOR	
MXT-7540A 540MB 14ms 64K IDE	*$17*
MXT-7546A 540MB 12ms 256K EIDE	*$19*
MXT-7850 850MB EIDE	$23
QUANTUM	
LPS-420AT 420MB IDE	$16
LT-540A 540MB 11ms 128K IDE	$19
LT-730A 730MB IDE	*$22*
MV-540S 540MB 14ms 128K SCSI-2	*$19*
LT-540S 540MB 11ms 128K SCSI-2	$23
LT-730S 730MB 11ms SCSI-2	$25
PD-1080S 1.0GB 10ms 512K SCSI-2	*$53*
1400S 1.4GB 8.9ms 512K SCSI	*$69*
EM-2100 2.1GB Empire 8.9ms 512K SCSI	*$83*
Q34301GPS 4.2 GB 8.5ms	*$1449*
WESTERN DIGITAL	
WD-2420 420MB 12ms IDE	*$185*
WD-2540 540MB 12ms IDE	$215
WD-2700 730MB 10ms IDE	*$23*
WD-2850 850MB 10ms IDE	*$25*
WD-3100 1.08GB /WD3120 1.2 GB 10ms	$339/$35
MICROPOLIS	
MC2210/2210AV 1GB 10ms SCSI	$680/$845
MC4110 1.0 GB 8.5ms IDE/SCSI	*$569*
MC2217A 1.75 GB 10ms 512K IDE	*$720*
MC3243 4.0GB SCSI	*$179*
MC1191AV 9GB 10ms 5.25X1" SCSI	*$334*
SEAGATE	
ST-31200N 1.05GB 9ms 256K SCSI Int /Ext	$514/$599
ST-12400N 2.1GB 9ms Int. / Ext.	$899/$99
ST-15230N 4.3 GB 9ms 512K SCSI Int/Ext.	$1740/2149
4100N 9.0 GB 11.5ms INT SCSI-2	*$399*
4100NW 9.0 GB INT SCSI-3	*$379*
Teac 1.2MB / 1.44MB Floppy Drive	$41/$31
31/2" HDD 25 Pieces Package	$9

Best Prices! Best Quality! Best Service!

CALL FOR UPDATED PRICES

LAITRON COMPUTER WEEKLY SPECIALS

Multimedia 86DX2-66/256K

- 3PCI Pentium Ready 3.3V M.B.
- AMD 80486DX2-66 CPU w/fan
- 4MB RAM 70ns 72pin
- Teac 1.44 MB Floppy Drive
- 32 Bit PCI IDE W/ HI SPEED IO
- Quantum 540 MB IDE HD
- 32 Bit PCI Video Card w/1MB
- 14" 1024X768 .28dp SVGA
- Mitsumi 101-key Keyboard
- Mini Tower Case w/230w P.S.
- Sony 2-Speed CD-ROM
- Sound Blaster 16 Bit Sound Card
- Deluxe Speaker & Mouse

$1099

Multimedia NexGen P80

SUPERIOR PERFORMANCE. UNBEATALBE PRICE.

- NexGen VLB M.B. & P80 CPU
- 8MB RAM 70ns 72pin
- 1.44 Floppy Drive
- 32 Bit VLB IDE w/2S/1P/1G
- QuaNTUM 540 MB IDE HD
- 32 Bit VLB Video Card w/1MB
- 14" 1024x768 .28dp SVGA
- Mitsumi 101-key Keyboard
- Mini Tower Case w/230w P.S.
- Sony 2-Speed CD-ROM
- Sound blaster 16 bit Sound Card
- Deluxe Speaker & Mouse

$1399

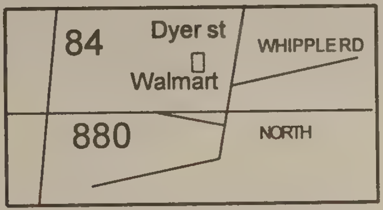
IBM SLC2-66 VLB

- IBM SLC2-66 Motherboard
- IBM SLC2-66 CPU w/Math Co.
- 2 VESA Local Bus w/64K Cache
- 4 MB RAM 70ns
- 1.44MB Floppy Drive
- 32 bit VLB IDE w/2S/2P/1G
- 270MB HD
- 1.44MB Floppy Drive
- 32 bit VLB VIDEO w/1MB
- 14" 1024x768 .28dp SVGA
- Mitsumi 101 Keyboard
- Mini Tower Case
- 230-Watt Power Supply

$789

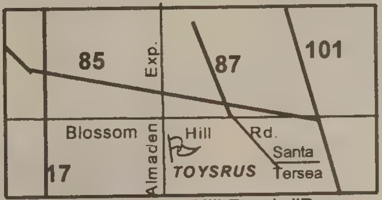
LAITRON COMPUTER

GRAND OPENING

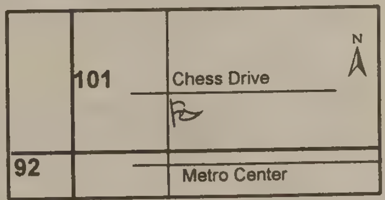


2837B Whipple Rd.
Union City, CA 94587
Phone: (510)441-7456
Fax: (510)441-7457

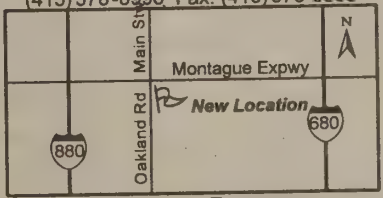
GRAND OPENING AT 4/3/95



1080 Blossom Hill Road. #D
San Jose, CA95123
Tue - Fri 9:00 am - 6:00 pm
Sat & Sun 12:00am - 6:00 pm
(408) 978-9898 Fax: (408) 978-9901



1169 Chess Drive, Suite E
Foster City, CA95123
Mon - Fri 9:00 am - 6:00 pm
Sat 10:00am - 4:00 pm
(415) 578-8998 Fax: (415) 578-8880



1538 Montague Expressway
San Jose, CA 95131
Mon - Fri 9: 00am - 6:00 pm
Sat 10:00am - 4:00 pm
(408) 321-9488 Fax: (408) 321-8349
Tech. Support: (408)321-9353

MULTIMEDIA

CREATIVE LABS	
SoundBlaster 16 Value	$89
SoundBlaster 16 SCSI-2 / SCSI-2 w. ASP	$110/$187
SoundBlaster16 MCD / MCD w. ASP	$75/$167
SounBlaster AWE32 / AWE32 Value	$259/214
WaveBlaster/VideoBlaster	$159/$289
Video Spigot Windows	$149
Discover16 CD Rom Kit	*$239*
Digital SchoolHouse CD ROM Kit	*$259*
Edutainment CD Rom Kit	*$395*
Multimedia Office CD Rom Kit	*$489*
MEDIA VISION	
Pro Movie Spectrum	$199
SIGMA DESIGNS	
Reel Magic Lite	*$259*
Reel Magic Upgrade Kit	*$495*
SONY	
Sony Multimedia Upgrade Kit	$198
YAMAHA Speaker	
YST-M5 / YST-M10 / YST-MSW10	$54/$72/$159
YST-SS510/YST-SS1010	$199/229
Speaker 224 / 120 / 80 / 50 / 10W	$149/$69$55/$35/$18

CD-ROM

CHINON	
CDS-535 220ms 300Kb/s, 2 SPEED SCSI Int.	$179
MITSUMI	
FX400 230ms 600Kb/s, 4 SPEED IDE Int.	$179
NEC	
CDR-510 3 SPEED Int.	$226
3XP Portable 3 Speed	$370
4XI 220ms 600Kb/s 4Speed Int.	$299
PANASONIC	
CR-5622 SPEED Int.	*$119*
PHILPS	
PCMCIA 2 PEED w. Crad	$290
PLEXTOR	
PX-43CH 220ms 600Kb/s 4 SPEED Int.	$419
SONY	
33A IDE 2 SPEED Int w. Card Int.	$119
CDR-55E 250ms 300Kb/s 2 SPEED IDE Int.	$119
TEAC	
CD-55A 195ms 600Kb/s 4 SPEED Int.	$169
TOSHIBA	
5302B 170 ms 600Kb/s 4 SPEED IDEInt.	$189
3501B 150ms 600Kb/s 4 SPEED Int.	$289

PRINTERS

CANON	
BJ-200E / BJC-600	$269/$509
HP (Hewlett Packard)	
DeskJet 540 / 560C	$286/$466
LaserJet 4L / 4 / 4Plus	$645/$1355/$1399
LaserJet 4M / 4ML / 4M Plus	$1895/$1690/$980
LaserJet 4P / 4MP	$929/$1350
LaserJet 4V / 4MV	$1879/$2739
LaserJet 4Si / 4SiMX	$2824/$3990
HP 1200 C / 320 Portable	$990/$289
OKI DATA	
OL400E Laser	$425
PANASONIC	
2023 24 pin, Quite / 2123 24 pin	$185/$199
Color Kit for 2123	$54

NETWORK

3COM	
3C503 Etherlink II 16 Bit Coax / TP	$129
3C509 Etherlink III Coax / TP / Combo	$99/$79/$110
3C589 PCMCIA TP / COMBO	$165/$199
3C395-TX PCI 10/100 TP	$223
3C16170 Link Builder (12 TP)	$347
Transcend Link builder FMS Management	$339
HEWLETT PACKARD	
Advanced Stack 12 / 24 port HUB	$585/$980
Jet Direct J2550A TP/J2552A combo	$320/$385
INTEL	
EtherExpress 16 Coax / TP / Combo	$89/$89/$105
EtherExpress Pro / 100 PILA 8465 PCI TP	$214
Netport II Thin & Thick / 10BT	$385
Netport Express XL	$449
SMC	
Elite Ultra 16 Coax / TP / Combo	$74/$84
Elite Plus 16 Combo	$129
16 Bit BusMaster (NE2100 Compatible)	$79
Coax / TP / Combo	$28/$28/$28
PCMCIA	$165
Hub and Repeater 8 / 12 Port 10 base T Hub	$123/$264
NOVELL 3.12 5/10/25 USER	$510/$1140/$1790
NOVELL Personal NetWare 2 Set Package	$110

KEYBOARDS

FOCUS	
2001 / 7000 w. TrackBall / 9001	$31/$42/$44
KEYTRONIC	
101-Key / 101-Key 2189 / 124	$22/$26/$55
MAXISWITCH	
2189 101-Key / 124-Key	$26$55
MICRO SOFT	
Natural Keyboard	$84
MITSUMI	
Model Z / Model R 101-Key	$15/$22
NORTHGATE	
Omni 101 / Omni 102 / Ultra	$65/$55/$83

MODEMS

DIGICOM	
14400 Fax Modem / w, Voice	$75/$84
SIIG	
28800 V.34 Intnal Fax/Modem	$119
US ROBOTIC	
14400 Fax Modem Int / Ext.	$95/$111
28800 Fax Modem w. V34 Int / Ext.	$215/$235
ZOLTRIX	
9600/2400 Fax Modem Dos / Win Int.	$34/$39
14400 Fax Modem / w. Voice Int	$55/$69
14400 Fax Modem Ext.	$89
28800 Fax Modem V.34 Int / Ext.	$134/$145
PCMCIA 9600 / 14400 Fax Modem	$145

POWER SUPPLY & CASE

200 / 230/250/300 Power Supply	$30/$35/$45$60
DesktopAT Case w/230W Power Supply	$49
Mini-Tower Case w/230W Power Supply	$44
MediumTower Case w/250W PS	$69
Full-Size Tower case w/250W PS	$89
SuperTowerCase w/300WPS	$165
APC UPC 285/400/600/900VA	*$112/$143/$235/$260*
APC SMART 400/600/750/900VA	*$263/$339/$355/$459*

MISC

LOGITECH	
FirstMouse / MouseMan	$25/$32
MouseMan Bus / Cordles 2	$55/$89
Trackman Oem / Retail	$59/$73
MICROSOFT	
Serial / Bus (w/System)	$35/$55
3-Button Mouse	$7

SOFTWARE

Lotus1-2-3 for Windows	$290
Microsoft DOS 6.22 1(w/System Purchase)	$45
Microsoft Excel 5.0 for Windows	$285
Microsoft Office 4.2 for Windows	$450
Microsoft Office 4.2 Upgrade	$285
Microsoft Project 3.0 for Windows	$425
Microsoft Word for Windows	$290
Microsoft Windows 3.11 (w/System Purchase)	$55
Microsoft Windows 3.11 Worksgroup(w/System)	$70
PFS Works for Windows	$29
WordPerfect 6.0(WIN)	$249
Microsoft Window NT 3.5 (Work Station)	$295

CD ROM SOFTWARE

Animals v.1.0 (DOS)	$11
Arthur's Teacher Trouble (MPC)	$15
Barney Goes To Space	$19
Battle Chess (Enhanced)	$18
Bus & Econ Atlas (DOS)	$20
CD Game Pack II (DOS)	$15
CD Storytime (DOS)	$14
ChessMaster 4000 (MPC)	$14
Compton's Encyclopedia (MPC) 1995	$29
Dinosaur & Spac Adventure	$17
Dr. Window Shareware	$14
Ftura Games	$19
Just Grandmon & Me	$15
Koda Photo Access	$11
Mario's Missing / World Atlas	$15
Microsoft Encatar Encyclopedia (MPC) 1995	$39
Microsoft Home	$109
Mirror Mirror	$20
Super 10 (10 CD) 109 CD TITLES	***$35***
Wing Commander / Ultima VI (DOS)	$15
Winware! Vol. 3	$16
Woman of Venus	$24
World of Flight	$25
World Atlas v. 3.2 (MPC)	$11
World of Trains	$25

CALL FOR ADULT TITLES & MORE

Troubleshooting & Upgrading

Labor charge for:

CPU & Memory Upgrade	FREE
System Diagnostic Checkup	$10
Multimedia Kit Installation	$30
Installation for HDD	$15
Video Card + Driver Setup	$20
Motherboard Upgrade	$20
Install Software/Setup	$30/hr
System Troubleshooting	$40/hr

Terms & Conditions:

- One year parts two years labor waranty
- Prices and availability subject to change without notice
- Shipping, COD, & insurance are extra and not refundable
- Prices reflect cash discount
- All returns must have prior authorization
- All returns must be in original packaging complete with manual, software,...etc.
- 15% restocking charge
- Not responsible for typos on this ad

Classifieds

Accessories

ELECTRONIC DOCUMENTS WEIGH LESS ©

800-SCAN

Document Scanning Services

1 800-800-SCAN

Quicken Checks Cheaper and Faster.
Quick books, laser forms also.
20% Free.
415-431-2700

Bulletin Boards

The GIFt Shop BBS (510) 609-1123. To Get the BeST Adult Images in the World, You Just Need to Push the Right Buttons! Straight & GAY users welcome.

Accessories

AMERICA'S ADVANCED AAA ACCESSORIES INCORPORATED

DISKETTES

Premium FORMATTED *(100% Error Free)*

		Qty 500	Qty 100
3.5"	**DS/ HD**	**29¢**	**29¢**
3.5"	**DS/ HD**	**20¢**	**21¢**
5¼"	**DS/ HD**	**19¢**	**20¢**

We Will Beat Any Advertised Price

1-800-214-4444

Bulletin Boards

PACIFIC EXCHANGE BBS 408-946-8561. Full Featured BBS with 12 Incoming Data Lines, 50,000 IBM/Window files, 10,000 Adult files, USA-Today online news, Games, Grafittie, Classifieds and more.

UNZIP IT! Download sexy GIFs 1 (900) 844-2200. 69¢ per minute. Must be over 18 years old.

Bulletin Boards

FIRST ONLINE. Over 30,000 files. 5.2 Gig! Internet Mail and Newsgroups. PC-SIG Library. Huge adult conference. All lines USR 1200-16,800 baud. SAN FRANCISCO: (415) 334-2400 SAN JOSE: (408)257-5800 FREMONT: (510) 797-8730 PLEASANTON: (510) 426-6030.

Bar Coding

BARCODE SOLUTIONS

Increase productivity and efficiency. Call

1-800-562-2726

for information

Windows and DOS application software

Time & Attendance ■ work-in-process

barcode readers ■ scanners

printers and accessories

vidya data systems

ph# 415.661.7780 fax# 415.661.7782

Bulletin Boards

INTIMATE IMAGES. Original Adult Images & Video Clips. Free Samples. No Hourly Fees!1200-28,800 Baud. (415) 598-0898.

Bulletin Boards

The Hot Geeks BBS (408) 374-6250. A small start-up BBS offering DOS & Windows Shareware, adult file areas, and free trial access.

HOW TO PLACE YOUR CLASSIFIED AD IN MICROTIMES

MINI DISPLAYS: 1 column inch = 1 5/16" across x 7/8" down. $59 per col/inch, camera ready art, or $59 + $20 for 1x typesetting/production fee.

BUSINESS ADS: Rates are $20 for 15 words or less. $.50 for each additional word. Your phone number counts as one word. First few words or line is bolded.

CATEGORIES: See index to choose the classification that best describes your product or service.

FREE ADS: Private individuals may have one free classified ad one time of 15 words or less under Hardware, Software, or Accessories only. Mail coupon by the noon deadline for that issue, no phone orders for free ads.

No refunds will be given after copy is received. Credit may be given under certain circumstances.

Mail, deliver or fax this coupon along with payment by the noon deadline for that issue.

TO RESERVE SPACE:

Phone Orders
(510) 934-3700

Fax Orders
(510) 934-7351

America Online

Mercury Center Online

MICROTIMES ON-LINE:

A new service to have your ad appear on the BBS. Your ad will be posted in front of millions of potential additional buyers. There is a $10 charge for classified display ads to use this service.

•Your Classified ad in MicroTimes can now potentially reach millions of buyers via computer access!
$10 Additional charge for paid classified display ads

MICROTIMES On-Line
Electronic Classifieds
PC & Mac Supported

CLASSIFIED CATEGORIES

- ○ Accessories
- ○ Bar Coding
- ○ Bulletin Boards
- ○ Cartridge Refill
- ○ CD-ROM
- ○ Computer Rentals
- ○ Data Conversion
- ○ Data Recovery
- ○ Desktop Publishing
- ○ Hardware
  - ○ For Sale
  - ○ Wanted
- ○ Miscellaneous
- ○ Personals
- ○ Optical Scanning
- ○ Repairs
- ○ Services
- ○ Software
  - ○ For Sale
  - ○ Wanted

CAREER MARKETPLACE CATEGORIES

- ○ Employment Information
- ○ Jobs Offered

CONSULTANTS NETWORK CATEGORIES

- ○ Accounting
- ○ Business Opportunities
- ○ Engineering
- ○ Finance
- ○ General
- ○ LAN
- ○ Legal
- ○ Programming
- ○ Technical Writing
- ○ Training

○ MULTIMEDIA

○ Other______________

CHECK HERE TO PLACE YOUR AD ON-LINE! ☐

____

____

____

____

____

____

Cost of ad__________ x number of issues to run__________ = Amt. enclosed__________

○ Classified ○ Career Marketplace ○ Consultants Network ○ Multimedia

○ Check/MO ○ Visa ○ MasterCard Credit Card #____________________Exp Date.______

Name____

Adress____

City______________________State______________Zip______________

Phone (______)____

SEND TO: MicroTimes Classifieds, 3470 Buskirk Ave., Pleasant Hill, CA 94523

DEADLINE FOR INSERTION IN THE MAY 29, 1995 ISSUE IS NOON ON FRIDAY, MAY 5, 1995.

Classifieds

Bulletin Boards

FREE WINDOWS FILES, Windows OnLine (510) 736-8343 bbs. Get those hard to find public domain Win3 files. Call from your home or office, by modem. Assist your company with their networking of Windows. Developers, upload your demos and shareware for distribution. WOL provides 50 new Win3/DOS files every day & we currently have over 25,000+ Win3 files and 65,000+ total files. WOL has over 650 message and support Conferences. Publisher of the acclaimed WinOnLine Review, and the WOLR Shareware Edition online magazines. WOL staff writers provide reviews of new Win3 software and hardware - US Robotics Dual Standard modems (14,400 BPS) on all 17 phone lines. 13 gigabytes. Visa and Mastercard accepted. Editor & Publisher, Frank Mahaney.

LIBERTY BBS modem 800-474-1818. Local access phone numbers from 9 Calif. area codes. Internet E-Mail & Usenet Newsgroups. Linked nationwide for chat 6pm-midnight every evening! Free time on first & every call!

Virtual Village (510) 796-3675. Not your daddy's bulletin board.

Business Opportunities

Become an Independent Software Manufacturer. Low start-up.. Unlimited potential! Free information by mail. (800) 726-6310.

COMPUTER OWNERS - NEED $? WANT A HOME BASED BUSINESS WITH A FUTURE? CAN YOU AFFORD START-UP COST OF UNDER $200? IF YOU ANSWERED YES TO THESE QUESTIONS, WE CAN HELP! TCI SERVICES IS SEEKING INDEPENDENT REPS TO JOIN OUR GROWING NATIONWIDE NETWORK. FOR COMPLETE DETAILS, CALL (800) 246-9642.

850 WAYS TO WORK-AT-HOME. Contact Alternative Employment/Income Resource Center for an up-to-date directory: (408) 739-4347 ext. 25 (recorded message) or write to: 1030 E. El Camino Real, Ste. 315-A, Sunnyvale, CA 94087.

Cartridge Refill

REMANUFACTURED TONER CARTRIDGES

AS LOW AS
$34.50
INK JET CARTRIDGES REFILLED
RIBBONS RE-INKED
FREE LOCAL PICKUP & DELIVERY →
1-800-484-9896-1055
LOCAL (408) 779-6940

IBM, HP EPSON, APPLE, CANON, OKIDATA, SHARP, NEC HITACHI, KYOCERA, TOSHIBA, RICOH, ANDMANY MORE.
THREE OR MORE
100% GUARANTEE

CARTRIDGES RECHARGED

Laser Printers
HP - Canon - Apple - IBM - NEC - Epson - Okidata - Panasonic & many more
HP 2 & 3 special $24.99 w/ exchange
Super Drum Available

Personal Copiers
PC-20, A-15, A-30

Free Local Pick-Up & Delivery
We Pay Top $ For Empties
Service & Repair Available
100% Warranty

(510) 832-2828 (800) 330-2828

CD - ROM

CD-ROM GRAPHICS
COLOR PRINTING
and D[illegible]ATION
ONE SO[illegible] PRICES!
SPICER GRAPHICS
415-988-1101

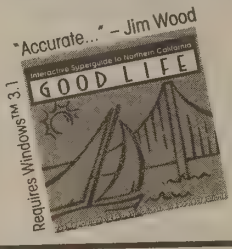
Cartridge Refill

CD - ROM

Adults CD ROM. All ROM disks are menu driven and BBS ready. Titles available PC-pix volumes I and 2, 600+ mega bytes, $159. Erotic Encounters, worlds largest adult CD ROM $139. Storm volumes I, 2 or 3 $159/each. Ecstacy Hot Picks $179. Cal Ad Software, P.O. Box 50204, Long Beach, CA 90815.

Smut Picture Racket. OUTRAGEOUS multimedia CD-ROM for Mac & Windows by Deborah Jaffe of Master/Slave Relationship. Making the industrial music/fetish underground accessible to everyone. $39.95 + $5 s&h 18+ only. (800) 752-9535 VISA/MC/AMEX orders, or fax (415) 386-4692, email: CYBERTZARA @aol.com.

Where are you going to eat out?



Interactive Superguide
Northern California

Contains full Good Life database of over 700 restaurants in SF, SJ, Peninsula, and East Bay on CD-ROM. Plus Arts, Entertainment, Day Trips, and much more! Call (415) 989 1844 for more info or to order.

Available at NCA, Fry's, and Kepler's, or send $24.60 to Good Life Publications, 760 Market #759, SF CA 94102

CD-ROM
SOFTWARE
RENTALS
TRY BEFORE YOU BUY!
NEW TITLES EVERY WEEK!
APPLY RENTAL TOWARD PURCHASE
$3.99 for 3 NIGHTS
Hundreds of Titles for PC & MAC
WE ALSO BUY & SELL NEW AND USED CD SOFTWARE.
AS SEEN ON TV
"COMPUTER CHRONICLES" PBS
COMPUTER SPECTRUM

214 California Dr., Burlingame (415) 347-4575

CD - ROM

CD ROM Mastering/ Duplication
Special pricing for quantities up to 100 CDs
Color printing on CD • Fast turnaround
ISO • HFS • Mixed Mode
Complete Multimedia Services
Interactive designs/Info-Kiosks
Desktop audio/video/Graphic design
415.344.0456
SIENNA DIGITAL

CD-ROM Mastering
Tadpole Technology
Production and Consulting for Multimedia or Archiving.
We digitize Video.
510-843-FROG (3764)

Doing Business at Your Home
Outside Sales Rep Wanted
—Over 34 PC Components To Sell—
Commission = 50% of Your Sales Profit
No Base Salary • Interested Please Call
(510) 795-6807

Linux Plus BSD CD-ROM. Full featured UNIX with X-Windows and all applications for 386 and better PC's. Easy to install and use. Only $39.95. (408) 727-3883.

Asian Adult CD-ROMs. Sampler Diskette/Catalog $5.00. CYBER-GRAPHIX, 2040 Polk #317M, San Francisco, CA 94109-2520. State Age!

Data Recovery

DATA RECOVERY IN HOURS.

- Over 10 years of experience with clients like HP, NASA, Apple, & FedEx.
- We've recovered more than half-a-million megabytes of lost data.
- We guarantee successful recovery of your lost data, or you pay nothing.
- Express One-Day Service is available.
- Call 24 hours a day.

LAZARUS
DATA RECOVERY
800-341-DATA
Ask for the Lazarus Technical Data Recovery Guide.
415-495-5556 • Fax 415-495-5553 • RESTRICTIONS MAY APPLY
381 Clementina Street • San Francisco, California 94103

Data Recovery

Data Recovery

"If DriveSavers can't recover your data, you might as well give up."*

*Reprinted from MACUSER, August 1994

DRIVESAVERS® DATA RECOVERY

Our proprietary techniques are so advanced, we can rescue data others might simply abandon. So, don't take chances with your data. If you can't afford to lose it, call DriveSavers. We've been restoring data and peace of mind since 1985.

400 Bel Marin Keys Bl.
Novato, CA 94949
415-883-4232

Call: 800-440-1904

DATA RECOVERY

24 Hour Turnaround
DATA-ONE
(408) 434-1002

• Free Estimate
940 Rincon Cir. San Jose
(HWY 880 & Montague)
9-5 Mon Thru Fri

Ontrack Data Recovery

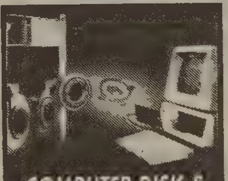
The world leader in professional data recovery services!

- Expertise in DOS, Novell, Macintosh, OS/2, Unix, Xenix, DEC, Sun, Wang, Banyan Vines and more!
- Service available on DAT, tape backups, and removable media.
- Professional service authorized by Conner, Digital, Iomega, Maxtor, Micropolis, Quantum, Rodime, Seagate, and Western Digital.
- For fast, successful results call Ontrack!

Ontrack®
DATA RECOVERY
2400 Main Street, Suite 200, Irvine, California 92714

1-800-752-7557
714-263-9245
MN: 1-800-872-2599
Europe: +44 (0)181 974 5522
Japan: (0429) 32-6365

Data Conversion



COMPUTER DISK & TAPE CONVERSIONS
Micros • Minis • Mainframes
Floppies, CD's, 1/2" & Cartridges
DATA CONVERSION SERVICES
(415) 456-7000

Hardware

Upgrade ROM for 3280 to 3280AS DTC SCSI controller $50. (510) 652-9856

Hardware

LASER PRINTER - CANON LBP-8 A1/A2. Good condition, fast, IBM compatible. Only $120. Free installation, free software Windows 3.1, DOS 6.22, etc.. Call after 4pm. Antonio (510) 471-8137.

Hardware

Backup power supply $125, new, 225w. Protects against spikes, surges, blackouts, (20-30min.), and equipment damaging brownouts. (415)456-7000.

Everex Laserscript LX - postscript printer, as new $450. (408) 427-1534.

MEMORY WANTED

NEW OR USED

30 PIN
1x3/1x9/1x8 (1MB)
4x3/4x9/4x8 (4MB)

MEMORY EXPERTS
Fax: 702-895-9007

72 PIN with PARITY
512x36 (2MB) 1x36 (4MB)
2x36 (8MB) 4x36 (16MB)
8x36 (32MB) 16x36 (64MB)

72 PIN No PARITY
1x32 (4MB) 2x32 (8MB)
4x32 (16MB) 8x32 (32MB)
No Quantity Too Large or Too Small
We Also Buy CPU's

1-800-252-5959

Classifieds

Hardware

$$$PAY$$$
NEW & USED
SUN, S.G.I., Workstations, Boards, Memory, CPU, Hard disk Drive
(408) 947-1728

MEMORY – XCHANGE

- **We Buy & Sell IBM Compatible, Mac, CPU, Memory, Hard Drive**
- **We Buy Non-Working SIMMs & SIPPs**
- **Special New 420MB SCSI $199**

C.G.I. Technology
Tel (408)973-9840 FAX (408)973-1925

AST GridPad PDA, 4meg ROM, 1meg RAM - Pen touch-screen recognition. Trade taped/HDD/DAT. Scott (408) 971-3425.

Toshiba T6400DX "big" portable PC, 8RAM/Exp 20, 205MB HD, mouse, carrying case, accessory slot, software $500. Doug (408) 247-7667.

Plotter HP 7475A, 3 years old, used 7 times, no manuals $200. Excellent condition. Dantana (408) 247-7667.

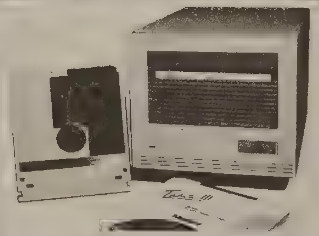
"TV tuner card" upgrades your VGA monitor to a TV set $70. Call Gary (408) 733-7401.

Hardware

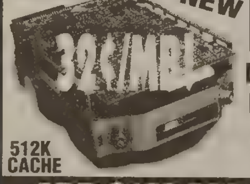
MEMORY
BUY AND SELL
SIMM • DIP • SOJ • ZIP
Guaranteed Lowest Prices
Upgrades for Desktops, Laptops, Laser Printers, from Apple to Zenith
ERITECH INTERNATIONAL
TEL: (818)244-6242
FAX: (818)502-5059

35 MHZ dual channel OSC $120. SCSI external CD-ROM $60. Eprom burner $30. Tel (408) 984-7252.

SCSI SOLUTIONS SALE
MONDAY THROUGH SATURDAY CLOSED SUNDAY
Disk◦Drive◦Depot
Full selection of hard, optical & tape drives
ERASABLE OPTICAL DRIVES
ALWAYS HAVE ROOM
NEVER ANY QUANTITY LIMITS
NEW HARD DISK DRIVES
2000MB-$549
3000MB-$895
3500MB-$1095
4000MB-$1395
FAST SCSI-II



UNLIMITED STORAGE



HUGE DRIVES-LOW PRICES
DIGITAL EQUIPMENT CORP
PC & MAC™ COMPATIBLE!
ONE YEAR WARRANTY ON THESE NEW HARD DRIVES
ADD $100 FOR ANY OF THESE DRIVES AS AN EXTERNAL UNIT
DEALERS AND RESELLERS WELCOME
MAGNETIC/OPTICAL DRIVES FEATURE REMOVABLE, REWRITABLE MEDIA!
CSC 1000MB, 1MB CACHE - $895
SCSI-II PC & MAC™ COMPATIBLE!
BRAND NEW!
CSC 1300MB, 1MB CACHE - $1495
ASK THE "LOW PRICE GUARANTEE" DEALERS TO MATCH THESE PRICES
500 LAWRENCE EXPRESSWAY • SUNNYVALE
(408)738-3095

Hardware

BUY & SELL - NEW & USED - RESELLERS WELCOME

SVGA .28 Interlaced Monitor	$128
SVGA .28 Non-Interlaced Monitor	$138
SVGA .39 Interlaced Monitor	$110
486DX2/66; DX2/80; DX4/100 CPU	Lowest, CALL
486SX/40 w/CPU, NEW	$85
486DX4/100 w/256K, 3VLB, NEW	$70
SIMM 1MS	$34
101 Keyboard, NEW	$10
2x CD Drive, NEW	$98
8 Bit Soundcard, NEW	$10
16 Bit Soundcard w/IDE, NEW	$45
14.4 Fax/Modem, NEW	$45
1.44 floppy drive 3 1/2", NEW	$21
486SX/40; w/2MB, 210MB, SVGA Mon. Sys.	$479
486DX/33 complete sys. w/SVGA .28 Mon.	$689
386 complete system w/SVGA Mon	$350
4W Speaker	$3
80W Hi-Fi Speaker	$30
IDE w/IO, NEW	$7.50

FOR-U COMPUTER
761 Mabury #2, S.J.,
CLOSE TO 101 FREEWAY & OLD OAKLAND ROAD
Ph: (408) 437-8718 MON-SAT 10am-6:30pm

HP Scanjet IIcx flatbed scanner 16.7 million color, 1600 dpi, SCSI card, Aldus Photostyler $875. (415) 788-6632.

Over 200,000 Items Available
Hardware, Software • Upgrades, Networks • Repairs
Open 9am-7pm, 7 days/week
- ★ Computer Systems ★ Power Protection
- ★ Mass Storage Devices
- ★ Video Display Adapters
- ★ New & Used Equipment
- ★ Network Connectivity
- ★ Printers, Plotters
- ★ Memory, Processors, CPU, Accessories, Point of Sale

"Look for our ad under "Wholesale Prices"
(408) 997-8380
Fax: (408) 997-8387
Computer Direct Wholesale

Hardware

HP IIP scanner for DOS/Windows sealed box $275 - OCR software - CAERE Omni Page Pro for Windows/DOS v5.0, never used $395. (415) 728-8250.

WHOLESALE PRICES. All Hard Drives new or refurbished - call for best prices. Over 200,000 items available - new, refurbished & used. IBM Thinkpad 350 486SL/25 4/250 notebook, refurbished, one year warranty $1075. IBM Thinkpad 755C 4/340 486DX475, active matrix, 1.44 floppy $4100 / 540 $4425. Color notebook 486DX33 4/130, DOS, Windows $1089. Multimedia 486SX25 desktop 4/210, double speed CD-ROM, speakers, DOS, Windows w/ zif socket $825. IBM PS1 486SX250 14" monitor 4/253 1.44 floppy, local bus, SVGA, 2400 modem, DOS, Windows, mouse, KB $1050. IBM PS1 486DX33 4/253 1.2/1.44, Windows, DOS, KB, .28 monitor $1075. SVGA monitor 14" .39, one year warranty $178. 14" .28 non-interlace $185. 17" .31 $399. 17" 1280x1084 .26 $519. Change your monitor to touch-screen as low as $299. We sell all kinds of software. Pentium 90MHz 256K cache $175. 60/66MB $135. 486DX100/280 PCI $149. 486DX266 Motherboard and CPU $169. New technology update - now you can use any PCMCIA card in your desktop system. Call us for best pricing. Upgrade your computer to a 386 for as low as $159 or to a 486 as low as $250, including labor. We buy used computer parts and non-working memory. Pay top $$$. Computer Wholesale. (408)997-8380 fax (408) 997-8387.

Hardware

HARD DRIVE: Unused 2.5 Western Digital HD IDE for notebook170MB $199. External 5.25 floppy drive with power supply with cable $140. Compaq Prolinea 4/120, KB, SVGA card $390. Call for more used items and hard to find items (408) 997-8380.

I/O cards, hi, IRQs/addresses, 16550 UARTS: Quatech 25/2P $75; STB 4 COM 4S $90. (415) 776-5184.

486DX33, 8MB, 245MB HD, ATI SVGA, CDROM, Sound card $650. HP4P Laser printer $690. 128MB external optical drive $490. 2XNZ2100 + Netware Lite $65. Call Joe (510) 881-5503.

DC2/20 cartridge $7. Color pocket TV $50. Syquest 44M cartridge $20. 386SX motherboard $30. Tel. (408) 261-0119.

4 meg 486DX2-66 VLB system, 200MHD $400. OS/2 3.0 $40. 2 meg VL VGA adaptor $70. (408) 241-0538.

Hardware Wanted

WANTED USED HEWLETT **PACKARD LASERJETS** MODELS II OR ABOVE. ALSO BUY COMPAQ, IBM PS/2, AST. WORKING OR NOT. (415) 344-9536.

Internet

Earn An
Internet PhD!
Only $69/3-hour Seminar
- Take any seven of the CCSV 3-hour seminars
- Work closely with a senior CCSV instructor
- Receive private, hands-on and group instruction
- Be involved in leading-edge Internet activities

Call for a free brochure or send E-mail to CCSV's info bot at ccsvinfo@hooked.net
Computer College Silicon Valley
(415) 325-Do-It = (415) 325-3648

The Internet is now open for business!
Doing Business on the Internet Seminar
Thursday, June 15
9am - 4:30pm
- Issues, strategies, costs and benefits of doing business on the Internet
- Connecting an organization to the Internet
- Developing a presence on the Internet yourself and/or hiring a service to help
- Business aspects of publishing on the World Wide Web
- Business information sources on the Internet

Computer College Silicon Valley
Fax: (415) 325-2304
E-mail: ccsv@hooked.net
(415) 325-Do-It = (415) 325-3648

For a list of all seminars and the latest schedule
E-mail: ccsvinfo@hooked.net
http://www.portal.com/~ccsv/ccsv.html

Hardware Wanted

Will buy used hardware.
Computer and printer service available.
Call Cesar at:
(415) 468-5920

Wanted: Amiga, RGB and composite monitors at cheap prices. Scott (415) 467-8349.

$$$TOP CASH PAID$$$ for CPU, Memory, DRAM, Hard Drives, Systems and Components. IBM - Mac. (408) 280-6558. Pager (408) 864-3051.

We buy new and used computer equipment for PC, memory, CPU, HD, monitor, case, non-working memory. We do consignments. (408) 997-8380.

Wanted - Used, working SC100 scanner. Mac end Photoshop compatible. (408) 733-4290.

Internet

INTERNET
Unlimited access for $12.50/month!!
Dial-in & log in as guest
415.364.6674
-DataTamers-
P.O. Box 2467
Menlo Park, CA 94026-2467
415.364.7919 (voice/fax)

LOW COST INTERNET ACCESS
FREE TRIAL
DPS COMMUNICATIONS
PERSONAL AND PROFESSIONAL INTERNET SERVICES
SLIP SHELL E-MAIL, NEWSGROUPS, TELNET, FTP
For Free Local Access:
510-865-9778

Classifieds

Multimedia

MULTIMEDIA AUTHORING SERVICES. Custom CBT courses, sales presentations. Cost comparable to traditional media. TELOS (415) 961-5242.

Personals

LIVE

33¢ p/min!

DATE LOCAL GIRLS
Home numbers!
LIVE TALK!
NO taboos!

(408)236-3311

Sexual Dates Bay Area Men/Women/Gay/Lesbian/Bi-sex Females. 1-900-844-2121 ($1.95/min.) NEW! Bay Area nude beach info.

ADULTS! "THE BEST FOR LESS" 33¢ per/min. Talk to, date hot local women tonight. Fantasies fulfilled! (408) 345-7051.

Personals

INTERNATIONAL AFFAIRS BBS/FTP service - Introducing Russian ladies online! Color GIF's, personals, email forwarding. 510-947-3147 to 14.4 k bps, ftp to ftp.netcom.com, pub/km/kmccall.

Sensual fantasies, adult talk. 900-844-6922 ext. 974. Fantasies 98¢/minute. Live talk 900-505-5477 $2/minute. (510) 865-7112 ext. 2799. Check payments by phone only line.

Repairs

PC Repair IBM, PC's or compatible. Upgrade, house calls, free diagnosis. Guaranteed lowest price. Networking. Computer training (classes or videos) for all software and networking. (408) 997-6944.

Monitor, terminal, VCR and laser printer repair at reasonable rates. Pick up and delivery service available. Call Monitor Repair Technology at (510) 828-8117 or (510) 277-0850.

Repairs

Monitor Repair Specialist

Expert Service,
10 years, Any Model,

- Terminal -
- SVGA,
- VGA, Mac,
- Multisync
- FREE pick up, delivery, estimates
- 2 days turn-around time
- 90 days warranty

$60 Flat Rate

LMR Monitor Repair
4938 Croydon Pl.
Newark, CA 94560
Tel (510) 793-0388

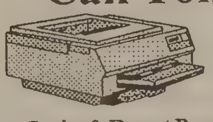
Repairs

Repairs

Repairs

LASER PRINTER REPAIR

Call Toll Free 1-800-201-5107



*HP (Hewlett Packard) * APPLE * CANON * IBM
*QMS * BROTHER * PANASONIC * EPSON
*OKIDATA * NEC * TI (Texas Instruments)
*SHARP * DATA PRODUCTS & Many more

- Onsite & Deport Repair (90 Days Warranty)
- FREE Estimates, FREE Pick up & Delivery, FREE Loan Laser Printer

Laser Technology (408) 254-2391

COMPUTER REPAIR
FREE DIAGNOSTIC

WHY PAY $40, $50 or MORE

Computer Training Academy will run a thorough diagnostic service check absolutely FREE!! Call Now for an appointment to have your equipment evaluated Today!

408-441-6990 ask for Mr. Stevens

CTA Inc.

FACTORY AUTHORIZED MONITOR SERVICE CENTER

All makes & models, $50 for most monitors. Free parts. Free estimate. 120 days warranty.

UNIVOX MONITOR SERVICE CENTER
1020 Commercial St., Suite 104, San Jose, CA 95112
TEL:(408)453-5453 FAX:(408)453-5452

LASER PRINTER REPAIR. $40. flat rate, plus parts in our shop. CALL (800) 365-2737 TODAY AND SAVE!

Monitor and Terminal Repair. $50 most models. Warranty. 30 years experience. Call Beyond Repairs 510/783-6805.

PC MONITOR & TERMINAL REPAIR

ANY SIZE, ANY BRAND USED BY
PC, MAC, WORKSTATION or MAIN FRAME

COLOR, SVGA, VGA, EGA, CGA & Mono

Lowest price * Free estimate * Free pickup * Free Delivery
* Fast Turnaround * 4-Months Warranty
Individual, Corporation, Manufacturer Welcome

SELL, TRADE, BUY NEW & USED MONITORS, PCs, GRAPHICS CARDS

California Monitor Services
4767 Lafayette #103, Santa Clara, CA 95054
TEL: (408) 986-8327 FAX: (408) 986-8328

Optical Scanning

Optical Scanning

Optical Scanning

ELECTRONIC DOCUMENTS©

- Self Recognizing Forms
  Makes your forms work for you
- Interactive File Management CD's
- BackFile Conversions
- Multi User Access

See us at the GTC Show, Sacto Conv Center May 17-19 Booth 736

800-SCAN

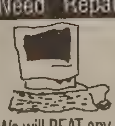
Document Scanning Services
1 800-800-SCAN

DRIVE REPAIR & DATA RECOVERY

SYST. SERVICES & UPGRADES
MAC, IBM, COMPAQ, DOS, NOVELL, SUN, UNIX, LAN, OS/2 & MORE.
ON-SITE SERVICES, FREE ESTIMATE, LOW RATE

DATA RECOVERY TECHNOLOGY
TEL. 408-249-1986 • FAX. 408-249-1987
5029 Stevens Creek Blvd., Santa Clara, CA 95051

Your Mac Broke Down?
Need Repair/Upgrade?



Call
(800) 622-7977
(408) 747-1555
Fax (408) 747-1110

We will BEAT any competitive price

Motherboard repair as low as $75.00
Power supply repair as low as $45.00
800K/1.4M Floppy drives ....$59/$75
Powerbook repair specialist ....CALL!!
LaserWriter ....CALL!!

24 HOUR SERVICE TURNAROUND
LONGER WARRANTY/FREE DIAGNOSTIC

DT&T Macintosh Service
586 Weddell Dr., Suite 1, Sunnyvale, CA 94089

Laser Printer Specialist. FREE ESTIMATES. All Makes & Models. 155 Blossom Hill Rd., San Jose (near Fwy. 101). LaserSharp (408) 224-0520.

IBM UPGRADE & REPAIR
(408) 448-0266

MRB WESTERN FLYER

UPGRADING & TROUBLESHOOTING IBM COMPATIBLE PCS. DESKTOP PUBLISHING.

ON-SITE SERVICE FOR HOME OR OFFICE IN THE SOUTH BAY AREA.

Mark Bohastra

FIX ANY PC'S PROBLEM ONLY $40. NO FIX, NO CHARGE. 24HR SERVICE. CALL GEORGE (510) 357-9546.

Computer Troubleshooting & Repairs. Lowest Rates! Guaranteed Service and Support. 24hrs/7days. FRP Data Services (408) 985-5337.

UniTek Co.
Hard Disc Services
Specializing in repair of PRIAM
CONNER
MAXTOR
SEAGATE
QUANTUM
Fax: (408) 263-9996
(408) 263-9994

Computer Repair
PC & Mac, Service & Sales
Mac, Powerbook, Notebook, any Software & Peripherals (memory, CPU, battery, accelerator)
BEST PRICE
(408) 997-8380

C l a s s i f i e d s

Repairs

Monitor Repair Specialist

Expert Service on All Makers & Models

$50 Flat Rate

Excluded (CRT, FBT & Bezel)
Any PC VGA, SVGA Monitor up to 14"

Monitor for PC, Mac, Workstation.
Refurbished Color Monitor For Sale

Compu Monitek Services, Inc.
3582 Arden Road, Hayward, CA 94545 Tel: (510) 264-1682 Fax: (510) 264-1684

MONITOR REPAIR

- Any size, any brand & specialized in BIG Screen & Terminal.
- Two days quick turn-around, 120 days warranty parts & labor.
- Free estimate, free local pick-up & delivery, Guaranteed Lowest Price.
- Systems upgrade & sale, trade new & used monitors.
- Systems & Monitor maintenance contracts welcome.
- Expert in IBM, Apple, Workstations, Network & PCB repairs.
- Install Touch Screen.

Paradise Computer Service & Repair
3400 De La Cruz Blvd, Suite #M, Santa Clara, CA 95054
TEL: (408) 988-2339
FAX: (408) 988-0928

The **TOTAL MAC**
Laser Printers
Mac Systems
Data Recovery
Free Pickup & Delivery in S.F.
On-Site Service
Most Repairs $60 + Parts
415-386-4320

Services

Pump up your multimedia with great sound. Let the audio experts at Funky Duck Productions sweeten the sound of your CD-ROM. That's what Tony Bove did for his "Haight-Ashbury in the 60's" title from Compton's New Media. We offer full multimedia audio services including, digital recording/editing; voice-overs; original music; audio special effects; sample rate conversion; CD mastering. (510) 597-0827

LEAD POTENTIAL CUSTOMERS TO YOUR BUSINESS. GET A CLASSIFIED DISPLAY AD IN
MICROTIMES
(510) 934-3700

Services

SALE • UPGRADE REPAIR • DATA RECOVERY

DATA RECOVERY

CAPACITY	MFM/IDE/RLL ESDI/SCSI
20 - 39MB	$250
40 - 49MB	$300
50 - 89MB	$350
90 - 159MB	$400
160 - 199MB	$450
200 - 299MB	$500
300 - 399MB	$550
400 - 499MB	$600
500 - 679MB	$650
700 - 1GB	$850

*** SPECIALIZE IN DOS, MAC, NOVELL**

* Data recovery includes repair of the drive.
* No charge if we are unable to recover data.

For Fast, Successful Results
CALL ProComputer

BUY • SELL • TRADE-IN NEW/USED HARD DRIVES

REPAIR PRICE

20 - 39MB	$35	200 - 299MB	$105
40 - 49MB	$55	300 - 399MB	$125
50 - 89MB	$75	400 - 499MB	$135
90 - 159MB	$85	500 - 679MB	$125
160 - 199MB	$95	700 - 1GB	$155

MEMORY

WE BUY & SELL & TRADE-IN NEW & USED MEMORY!!

MONTHLY SPECIAL

HARD DRIVE

420MB	$159
540MB	$169
850MB	$229
1GB	$319

MEMORY

1MB SIMM	$31
4MB SIMM	$115

PRO COMPUTER COMPANY

12761 Western Ave., Suite B
Garden Grove, CA 92641
Tel.: (714) 891-8293
Fax: (714) 891-3269
Business Hours:
9:00am to 6:00pm Mon. thru Fri.
Sat. 10:00am to 2:00pm

Prices subject to change w/out notice

Services

COMPUNET. Hardware and software consultation, repair, installations, troubleshooting, upgrades, set-up. $25/hour. Call (510) 682-2201 Lic# 19099.

Services

SOFTWARE DUPLICATION FROM $.29. Lowest Prices. Will beat anybody's prices. Error Free Duplication. Quick Turn-Around. Certified High Quality Media. Printing, Packaging and Fulfillment Services. Tapes/CD-R/CDROM Duplication. CD-R PRE-MASTERING. Saicom, Inc. (510) 438-4550. Fax (510) 770-8658. 43272 Christy St, Fremont, CA 94538.

Services

Don't Delay, Do it Today!!!

DUPLICATION

Our 10th Year!

CD-ROM

IBM OS/2
MACINTOSH • APPLE
COMMODORE • UNIX

No Minimums!!! Custom Printed Labels
Optical Text Scanning

I.D. DISK CO. (415) 883-4628
NATIONWIDE 1-800-987-7509

DATA RECOVERY SERVICES

- ★Specializing in data retrieval from hard drives with electronic or mechanical failures
- ★Comprehensive software data recovery from **hard drives, floppies,** and **tape**
- ★Over 2,000 successful data recoveries

DRS

DRIVE REPAIR SERVICES
DATA RECOVERY and DISK DRIVE REPAIR
–2122 Adams Ave. San Leandro, Ca. 94577
–(510) 430-0595 FAX (510) 430-0145
–6151 Golfview Dr. Bloomfield Hills, Mi. 48301
–(313) 645-6211

DOS – NOVELL – UNIX – MAC – OS/2

FOR HIRE...Typist--2,500 WPM

NEW! CD-ROM OUTPUT!
Why buy expensive hardware and software? Use our cost-effective quality service.

Any Printed Material Into Any IBM or Mac Program...FAST!

1-800-300-SCAN
Same Day Service

SCAN TYPE®
Scanning/OCR Services

Software

FREE IBM SOFTWARE CATALOG. Low Prices, Best Selection, CD-ROMS - BRIGHT IDEA! SOFTWARE, 5339 Prospect Road, Suite 197M, San Jose, CA 95129. VOICE/FAX (408) 252-0542.

AutoCAD LT. $240. (408) 247-4695.

AutoCAD R13 brand new with registration card for $2250. (408) 956-0586.

MICROTIMES classifieds

Classifieds

Services

Software Duplication Services

- Complete Software Packaging
- Duplication 100% Guaranteed
- Uploading Capabilities
- Fullfillment Services
- QIC Duplication
- EDI

San Jose, CA.

SDS
408•954•9505
Fax:408•954•9606

CD-ROM PRODUCTION

ACUTRACK IS YOUR CD-ROM PRODUCTION SOURCE.

* PRE-MASTERING
* ONE-OFFS
* MASTERING AND DUPLICATION
* INSERT PRINTING
* PACKAGING

WE ALSO CARRY BLANK CD-RECORDABLES.

Lowest price guaranteed.

3056 Castro Valley Blvd. * Castro Valley, CA 94546
Fax: (510) 581-7471 Internet: acutrack@aol.com
Telephone: (510) 581-4536

Complete Software Manufacturing Solutions

CD-ROM
REPLICATION

Highest Quality Media & Equipment

- Diskette & CD-ROM Duplication
- Printing: Custom Labels, Sleeves, Manuals, Data Sheets & Graphic Boxes
- Product Assembly, Packaging & Shrink Wrapping
- Inventory Warehousing & Order Fulfillment
- Graphic Design & Advertising Services

Duplication 100% Guaranteed !
Fastest Turnaround & Best Pricing

APC, Inc.

29620 Union City Blvd. Union City, CA 94587
Local 510-489-8677 Fax 510-489-8678

800-666-1007

Find the Right Person for the Right Job

ATTENTION HR DIRECTORS & RECRUITMENT MANAGERS:

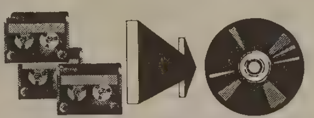
MicroTimes' CAREER MARKETPLACE is the place to reach qualified candidates for your job search. MicroTimes Magazine reaches highly qualified professionals with a monthly circulation of 230,000 in the Bay Area and greater Los Angeles area.

For more information or to reserve your space, call MicroTimes Classifieds

(510) 934-3700
fax: (510) 934-7351

Attn: Colorado* Users!

Are you using tape for extra storage?
Put your "backups" back on-line.
Get instant access to your archives.

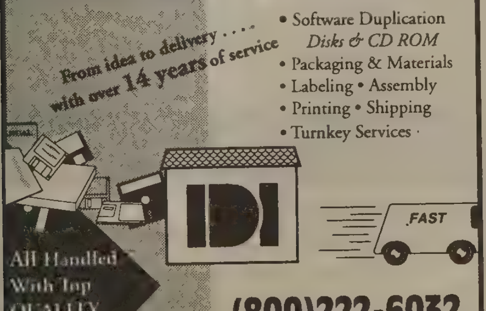


SCAN TYPE®
"Services for Electronic Publishers"
1-800-300-SCAN
*Most tape drives supported. Call for list.

TAPE to CD-ROM
$49.00**
**Single QIC-80 tape. Add'l tapes $15.00 each. Shipping & Tax extra.
Up to 650 MBytes/CD.
Complete directory structure.

SOFTWARE DUPLICATION

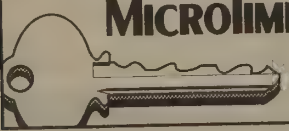
- Software Duplication
  Disks & CD ROM
- Packaging & Materials
- Labeling • Assembly
- Printing • Shipping
- Turnkey Services



All Handled With Top QUALITY SERVICE SPEED

(800)222-6032

International Datawares, Inc.
2278 Trade Zone Blvd
San Jose, CA 95131
Local 408-262-6660 Fax 408-262-8906



MICROTIMES CLASSIFIEDS SELL
Your key to success.

Software

WE BUY SOFTWARE
All Types and Quantities.
CASH PAID!
Call (714) 312-1069
Fax: (714) 434-4799

CAN YOU REMEMBER WHEN YOU'VE GOTTEN SO MUCH FOR SO LITTLE?
MICROTIMES
ADVERTISING
(510) 934-3700

Career Marketplace

Employment

PLANNING A CAREER or looking for a new one? Consider a career in the environmental Electric Vehicle Industry! EV's use semiconductors, the Future is electric, electronic! Call ENET-900 Career Information Service Line 1-900-446-6075 x985. $2.95/minute. 18 years or older.

Executive Director for high-tech non-profit (mill+budget). Responsibilities include: Personnel/Office Management, Budgeting, Strategic Planning, PR, Marketing, Fundraising. A1 communication skills & Mac industry experience essential. $/comm. experience, benefits. Send resume & salary requirements to BMUG ED Search, 1987 Drake Dr., Ste. 7, Oakland, CA 94611 or email: timBMUG@aol.com.

New adult BBS/Internet service seeks part-time tech-head jack/jane of all trades. Sysop, programming, networking, telephone and installation experience. Email replies to SFBAPG@aol.com.

175 COMPUTER MOONLIGHTING JOBS. Call AE/IRC (408) 739-4347 ext. 50 (recorded message) or FAX (408) 739-4344 attn: HRD.

Employment

IF YOU'RE LOOKING FOR A NEW, BIG MONEY-MAKING OPPORTUNITY...

Request your FREE ActionCall Information Kit today and learn how you can immediately start generating annual, ongoing commission income of $150,000 and more as an ActionCall Representative – without one cent of investment – in the computer industry. We're ready to rush you the FREE complete kit today!!!

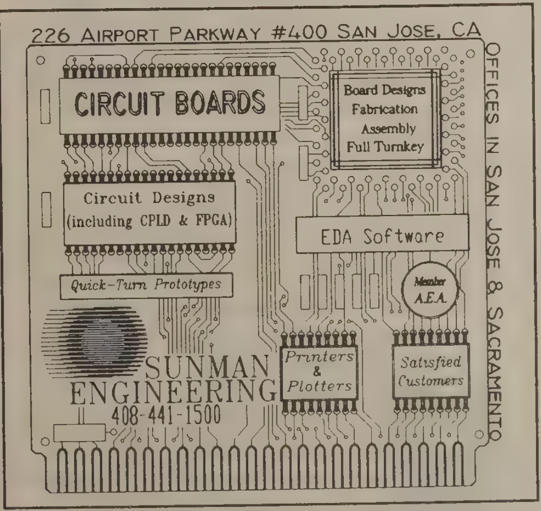
800-267-5440
FAX TO: 310-824-8885
Dept. 400-MT
OR WRITE TO:
ActionCall, Dept. 400-MT
10900 Wilshire Blvd.,
Suite 521, LA., CA 90024

F/T DBase programmer and database manager wanted for Good Vibrations, the worker-owned SF vibrator store and mail order company. You have minimum 3 years DBase programming experience, including maintaining and modifying DBase/Clipper programs. Familiarity with Novell 3.12 and Paradox required. Mail order plus. Excellent benefits. Apply in person by 5/19/95 at 938 Howard St., #101, SF.

Consultants Network

Engineering

Engineering



226 AIRPORT PARKWAY #400 SAN JOSE, CA
OFFICES IN SAN JOSE & SACRAMENTO

CIRCUIT BOARDS
Board Designs
Fabrication
Assembly
Full Turnkey
Circuit Designs (including CPLD & FPGA)
EDA Software
Quick-Turn Prototypes
Member A.E.A.
Printers & Plotters
Satisfied Customers

SUNMAN ENGINEERING
408-441-1500

General

CUSTOMIZED
Systems & Applications that Work Your way
415-941-0831
AJM Electronic Design

TSG
The Stradivarian Group
Professional Computer Services

Macintosh/DOS/Windows
- Software Installation
- Hardware Installation
- Custom Programming
- Networking • Training

(408)257-4482

Consultants Network

General

Professional Technical Services

DOS, Windows & OS/2 support for business

• Setup & configuration • Novell & Lantastic networks •
• Programming • Data Recovery • Debugging • Communications •

Microsoft Excel, Access & Visual Basic programming

On-site support 24 hours a day - 7 days a week

John Purins 415-340-1744

FILEMAKER PRO HELP FOR MAC'S AND WINDOWS PC'S. I specialize in database programming for small businesses and individuals. I can either teach you how to use Filemaker, or create a database for you. Networks setup. Needs analysis consulting. References available - first hour free for consulting. Gerald A. Matoi SF Tel: (415) 552-5120 Pager: (415) 605-6939.

MACINTOSH HELP. *Purchase advice, set-up *Network design / Installation *On site troubleshooting *Installs / Upgrades *Training. Call: Frank Higgins, Yoyodyne Systems - MacWorld speaker and co-author, best selling book Upgrading and Fixing Macs for Dummies. (415) 879-0285.

COMPUTER SOLUTIONS. Get the greatest return from your computer investment. MACINTOSH, WINDOWS, DOS. * Data Management * System Configuration * Integration * Troubleshooting. Best Service and Rates Available. Ten Years Experience. Call Paul Farrah at 415/591-9118.

Harry B. Garland: Computer Consultant. Voice/Fax: (415) 321-8219. Pager: (415) 520-1876. Dos/Windows. Only $12/hour! 5 years experience. Software/Hardware Installation & Upgrades: Motherboard, Multimedia, Floppy/Hard Disk, Sound Card, Modem, CD-ROM, BBS Installation/Other Communication Support, Power Supply Replacement, Case Changeout. Configuration Assistance: Purchasing Recommendations, Problem Solving, PC Repair, Software/Operating System Optimization, Assistance in learning How To Fully Use Your Computer. Custom Programming: Utilities, Databases. Satisfaction Guaranteed.

General

Computer Service and Support. Troubleshooting - Upgrades - Installs - System Analysis and Preventative Maintenance. Low Rates! FRP Data Services (408) 985-5337.

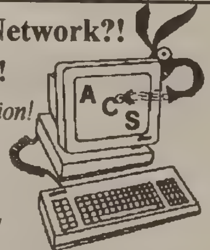
FREEMAN'S ALMOST FREE CONSULTING. Low rates for installing new systems or adding new hard or floppy drives, modems, printers, CD-ROMs. Also configure DOS or Windows software for optimum performance. Can give you shareware games, menus, freeware, utilities and delightful things you didn't dream existed. Kyle Freeman (415) 621-4430.

PC CONSULTING, YOUR HOME or OFFICE. Troubleshooting - Installs - Upgrades - Tutoring. Reasonable. Call Anytime. COMPUTER HELPER 1 (800) 921-HELP.

LAN

Old Network? No Network?!

We can HELP!



Get the edge on the competition! We specialize in network implementation (not just installation) and complete system solutions. Distributed Processing, Peer to Peer & Client/Server Networks including: Lantastic, Windows for Workgroups, Netware, Personal Netware & more.

- * Total analysis of hardware & software needs!
- * Complete network design & implementation!
- * Remote LAN, WAN & Internet connectivity!
- * Hardware & software upgrades & repairs!
- * Custom programming & systems solutions!
- * Service contracts available!

Novell Certified NetWare Engineer

Whether you have just a few PCs or an enterprise network - we are your computer solution! Give us a call!

Aardvark Computer Solutions

800-644-1099

Email: ACSC@ix.netcom.com

General

Accept checks by phone. Great for phone consultants, phone orders, bulletin board companies and more. Millions don't have credit cards, get their business! Agents wanted also. (510) 865-7112 ext. 3448.

LAN

NOVELL Certified Netware Engineer. Installation, service and troubleshooting, 10 years experience. LAN Solutions, Novell authorized reseller. (415) 579-1004.

Guaranteed Network Solutions. Lowest Rates! Installs, Configurations, Troubleshooting, Service and Support. FRP Data Services (408) 985-5337.

Novell Gold Authorized Reseller

- ■ Installation
- ■ Management
- ■ Sales

CNE PA

Abbott Computer Services
(510) 234-5618

LAN

Novell Certified NetWare Engineer

Network design & installation
Full service/turnkey status
486/66 networks under $8K!
Call Now! 408-268-9052

Total Networking Solutions for:

Windows NT, Novell, Windows for Workgroups and UNIX Environments.
Hardware, Software and Systems Integration.
E-mail Solutions-Internet Connectivity
cc:Mail, Microsoft Mail, Internet Mail and Lotus Notes.
Novell, HP, IBM, and Lotus Authorized Reseller.

Call For A Free One Hour Consultation
510-656-6666
InfoWeavers, Inc.
Internet: infoweavers@netcom.com

Novell Authorized Reseller

IBM

NOVELL NETWORKS

Novell Certified NetWare Engineer

- *Design and Installation*
- *Hardware and Software Configuration*
- *Support and Service*
- *Free Consultation*

COMTEQ COMPUTER CO.
(408) 988-4440

LAN and TELEPHONE CABLE INSTALLATIONS. LOW prices. One year warranty. RPS Teledata, Lic. #688214. (510) 980-2714.

NASCO Network Consulting. No confusion and no extra cost is what we stand for. (408) 589-0104.

Legal

IMMIGRATION

Law Offices of **Paul M. Heller**
Specializing in
Labor Certification & Work Visas
for
Engineering, Computer, Accounting, Business, & other Professionals.

Also: family visa/US spousal cases; changes to student (F-1) status; Treaty Trader/Investor (E-1/E-2); Intra-company transferee (L-1)

Individual, Bus. & Corp. Clients

Free Consultation!

Now doing personal injury!

415-291-8000

LAN

CNE + LAN/WAN Design/Install, NT, UNIX, Internet/WWW. Many years experience. Call Lawrence at (408) 383-4527.

Programming

Oracle, PowerBuilder, Access
FoxPro, C++, VB, Windows, NT
Arlington Computer Associates
510-284-9033

Database Programming

- ◆ FoxPro Programming
- ◆ Clipper Programming
- ◆ Network Installation
- ◆ Accounting systems
- ◆ System Administration
- ◆ Windows and DOS

Novell Certified NetWare Engineer

AccounTech

408/266-2660

Since 1983 ◆ Member BBB

LAN

COMPUTER NETWORKING

The right career choice and the right place...
NOVELL (CNE)
CERTIFIED NETWARE ENGINEER
Complete program and hands-on training at $2600
"Join the Information Super Highway Revolution"
COMPUTER NETWORKS ENGINEERING
TRAINING CENTERS
(408) 436-5577 (415) 594-9140
San Jose and San Carlos

Programming

CUSTOM DATABASES Fox Pro, Access, dBase, Clipper, Paradox. Multiuser systems, software modifications, code generators, PC/LAN, SBT. Walter St. John: voice (510) 549-9165; fax (510) 649-1804.

System Development PARADOX FOR WINDOWS / OBJECTPAL, Paradox (DOS) / PAL, Access / Visual Basic, Client / Server, Windows NT. DataTypes (510) 215-2391.

Inventory and POS. Complete business systems for auto parts, hardware, retail and wholesale stores. Trans Pro Systems (800) 756-3378 or (415) 941-1873.

Developer-publisher w/11 years exp.:design, code, test, manuals, support. Prof. prgrmmng in C++, Windows, Clip/Fox, etc. Hardware sales/services.
(415) 362-2595

Programming

Windows & LANs
Custom software using Visual Basic - Access - C since 1979
SYSPRO Corp
(510) 254-9755

➡ PARADOX ⬅
✔ Programs/Networks
✔ Troubleshooting
✔ On-Site Training
oTm Enterprises
(510) 886-1557

AmiSys Incorporated - Specialized in Custom Client/Server Windows Applications using Visual Basic and Delphi on Novell Networks. * SQL, Paradox, dBase, MS Access and Btrieve supported. * Documentation, Training and Windows Help available. * Low Prices, fast delivery, and happy customers are our specialities. Call Randy Kau today at 510-671-2103 for a FREE DEMO of what we can do for YOU!!!

Programming

Visual Solutions. Systems Consulting Services: SQL Server, Access, VB, C/C++, Smalltalk, TCP/IP, Lotus Notes. Phone: (510) 676-9171. Fax: (510) 676-0106.

CUSTOM PROGRAMMING. PARADOX FOR WINDOWS AND DOS, DELPHI, CLIENT/SERVER, REPORTSMITH. CALL GREG (408) 377-9250 FOR FREE CONSULTATION.

Training

Windows How To Help Line
1-900-678-9112
Need help installing a printer drive; Changing a Video driver; or Optimising your Windows environment? Then call for quick and easy step by step instructions
$2.95 for the first minute and $1.99 each additional minute
Sponsored by Talos Enterprises
P.O. Box 25132, Seattle, WA 98125

FILEMAKER PRO
Mac/Windows
Help/Training
Gerald Matoi
415-552-5120

Better hurry!
Better run and order a classified display ad now.
Call (510) 934-3700
MICROTIMES

MicroTimes Classified Advertising Can Work For You:

LAZARUS
DATA RECOVERY

"In our ten years of experience, we've got the most bang-for-the-buck from advertising in the MicroTimes Classified Section. And because we believe in giving our customers value, we know that MicroTimes is one of the best Advertising bargains out there!"

- David A. Fong, Data Recovery Specialist,
Lazarus Data Recovery

GULCH GOSSIP *continued from page 274*

LISTEN

And for those of you who are more Valley than Gulch (but I'm told its signal reaches the city), KSJS at 90.5 FM has switched format to all international sounds, "because there are too many alternative rock stations," from 6 am to 10 pm. Call (408)924-4547 or email *ksjs@livewire.com* for more details.

WATCH

You can now watch what's going on in the Warp TV office on the SS *Vallejo* in Sausalito through the VTV Webcam on the Warp Web page—and look around by adjusting your individual camera angle and viewpoint through Warp's VTV technology. It's all done through software, so what you choose won't affect anybody else's viewpoint.

warp
CALIFORNIA, INC.

There's a bit of irony here since **Eric Gullichsen** is rumoured to frequently complain about surveillance techniques—so check it out before he changes his mind. The URL is *http://www.warp.com/* and the demos are available in /pu/vtvdemos .

MUSIC & MULTIMEDIA '95

This year's Music & Multimedia is on May 30 at the Nob Hill Masonic Center in San Francisco. Details of *all* the panels are not set as we go to press; those already set look good, covering a wide range of topics from basic tools and production techniques (there's even a workshop taught by Marc Canter), to creating new kinds of musical experiences, to marketing them and distributing them online.

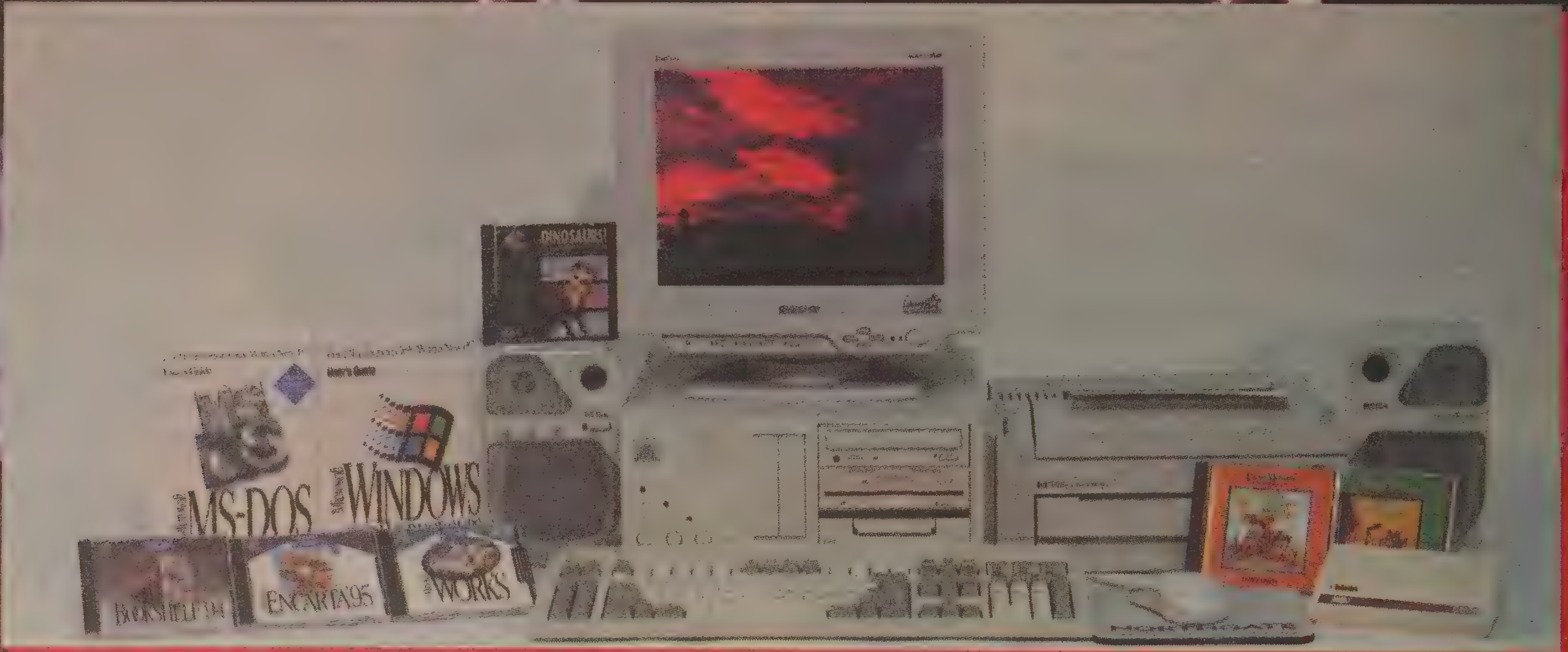
It looks as though there'll be lots of chat about "enhanced CDs" and whining about the platform difficulties. The panelists names are mostly heavyweight, with the exception of one gossip writer they seem to have picked up. In the evening some number of new and dazzling titles will be premiered.

Anyway, for further details, contact the San Francisco Chapter of the National Academy of Recording Arts & Sciences, Inc. at (415)749-0779 or email *sfnaras@well.com* . General admission for Music & Multimedia '95 is $25 for premieres and exhibits or $25 for seminars and exhibits. A complete package of premieres, seminars, and exhibits is $40. Exhibits only are $10. ■

Copyright © 1995 by Jonathan E. All rights reserved.

HI-TECH USA

(408) 262-8688 Milpitas
(415) 508-8688 San Carlos



HI-TECH PROFESSIONAL
Multimedia Systems

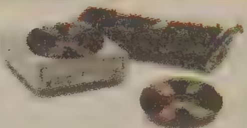
- Motherboard with CPU
- **8MB RAM**
- **850MB Fast IDE Hard Drive**
- VLB or PCI IDE with I/O
- Diamond Stealth 64 1MB VLB or PCI
- **Quad-Speed CD-ROM**
- 16-Bit Sound Card & 80W Speakers
- 1.44MB 3.5" Floppy Drive
- **15" SVGA .28 Color Monitor**
- Mid Tower Case with Power Supply
- Keytronics or Focus 2001 Keyboard
- Microsoft Serial Mouse with Pad
- Microsoft DOS 6.x
- Microsoft Windows for Workgroups 3.x
- **Microsoft Encarta, Golf, Money, Works, Entertainment Pack, Home Sampler, Dangerous Creature**

486SLC2-66/64K VLB	$1,598
486DX2-50/256K VLB	$1,648
486DX2-66/256K VLB	$1,668
486DX2-80/256K VLB	$1,688
486DX4-100/256K VLB	$1,748
P5-60/256K VLB-PCI	$1,868
P5-66/256K VLB-PCI	$1,908
P5-75/256K VLB-PCI	$2,018
P5-90/256K VLB-PCI	$2,188
P5-100/256K VLB-PCI	$2,358

UPGRADES

Memory Upgrade	$CALL
1.2GB Hard Drive	Add 110
17" Non-Interlaced Monitor	Add 80
14,400 Internal Fax Modem	Add 44
28.8 Internal Fax Modem	Add 90
Colorado Tape Back-up DJ-20	Add 130
Microsoft Professional 4.3	Add 488

MULTIMEDIA • CD SOFTWARE TITLES



Chinon 525 (Int.) 2X 280ms SCSI	$124
Chinon 535 (Int.) 2X SCSI	185
Chinon 545 (Int.) 4X IDE	166
Mitsumi Dual Speed (Bare Drive)	106
Mitsumi FX 400 4-Speed IDE	174
NEC 3X (510) Triple Speed SCSI Int.	184
NEC 4X (511) 4-Speed SCSI Int.	286
Panasonic CD-562 Dual Speed (Bare Drive)	114
Panasonic 579BP 4-Speed Int. IDE	178
SONY 55E Dual Speed (Bare Drive)	106
TEAC CD-55A 4-Speed Int. IDE	166
Toshiba XM-3601 (SCSI) 4-Speed Int.	286
Toshiba XM-3601D1 (SCSI) 4-Speed Ext.	388
Trantor SCSI Host w/Driver	43
Turtle Beach Monte Carlo 16-Bit (AT)	68
Altek Lansing Speakers ACS50/ACS3/ACS300.1	68 / 158 / 218
Deluxe Speakers	6
80 Watt / 120 Watt Speakers	42 / 56

SOUND CARDS

16-Bit Sound Card	$48
Mediavision Jazz 16	50

CREATIVE
CREATIVE LABS, INC

Sound Blaster Pro 16 IDE	74
Sound Blaster Pro 16 MCD	72
Sound Blaster Pro 16 MCD w/ASP	108
Sound Blaster Pro 16 SCSI II	102

[illegible]

The Best 13 CD Pack ... $38
[illegible] Jewels of the Oracle, The Paper Bag Princess
[illegible] Game Pack, PC [illegible] Photo Library

Microsoft Game Bundle (w/[illegible]
Flight Simulator, Encarta, [illegible]
Home Sampler with 6 Games

14,000 Programs	$8
3D Animania	8
Animals v1.0 DOS	10
Arthur's Teacher Trouble	14
Carmen San Diego DOS	15
CD Deluxe Pak (Chess Master 3000, Mavis Teaches Typing, US Altas, World Atlas)	14
CD Game Pack III DOS	14
Chess Master 4000 MPC	14
Compton's Interactive Encyclopedia MPC	22
Desktop Publisher's Dream 1994	8
Dinosaur	16
Doom	9
Eureka Pak (CD Deluxe Pack, Compton's Interactive Encyclopedia, Challenge Pack, 14 Titles on 3 CDs)	44
Game Galore	8
Just Grandma and Me	14
King's Quest VI DOS	15
Mario is Missing	15
Mavis Teaches Typing MPC	13
Mayo Clinic Family Health	13
Microsoft Bookshelf MPC 1994 (with system)	38
Microsoft Encarta 1995 (with system)	28
MIDI Music Shop	14
Mixed-up Mother Goose MPC	11
National Park	16
PC SIG 12th Edition	18
Playing with Language (English, French, German, Japan, Spanish)	15
Return to Zork	16
Sleeping Beauty	11
Star Trek: 25th Anniversary	18
Star Wars Chess & MPC	16
Time Table of History DOS	14
Tool Works Reference Library	14
Top 201 Games	9
Travel to Space	8
US Air Power	8
US Aircraft Carrier	8
US Atlas v3.1 MPC	12
US Bomber	8
US History DOS/MAC	14
Window Program	8
World Atlas v3.2 MPC	12
World of Education	8

HI-TECH FAMILY
Multimedia Systems

- Motherboard with CPU
- **8MB RAM**
- **540MB Fast IDE Hard Drive**
- VLB or PCI IDE with I/O
- VLB or PCI SVGA Card w/1MB
- **Double-Speed CD-ROM**
- 16-Bit Sound Card & Speakers
- 1.44MB 3.5" Floppy Drive
- **14" SVGA .28 NI Color Monitor**
- Enhanced Case with Power Supply
- Keytronics or Focus 2001 Keyboard
- Microsoft Serial Mouse with Pad
- Microsoft DOS 6.x
- Microsoft Windows for Workgroups 3.x
- **Microsoft Encarta, Golf, Money, Works, Entertainment Pack, Home Sampler, Dangerous Creature**

486SLC2-66/64K VLB	$1,298
486DX2-50/256K VLB	$1,348
486DX2-66/256K VLB	$1,368
486DX2-80/256K VLB	$1,388
486DX4-100/256K VLB	$1,448
P5-60/256K VLB-PCI	$1,548
P5-66/256K VLB-PCI	$1,618
P5-75/256K VLB-PCI	$1,728
P5-90/256K VLB-PCI	$1,898
P5-100/256K VLB-PCI	$2,058

UPGRADES

850MB Hard Drive	Add $60
1.2GB Hard Drive	Add 170
15" Non-Interlaced Monitor	Add 80
17" Non-Interlaced Monitor	Add 360
14,400 Internal Fax Modem	Add 44
Colorado Tape Back-up DJ-20	Add 130
Microsoft Professional 4.3	Add 488

Why do customers keep buying from HI-TECH USA? Simply because we deliver the best value.

SUPER SALE	MOTHERBOARD	MOTHERBOARD WITH CPU	* BASIC SYSTEM	* BASIC SYSTEM W/4MB RAM	* BASIC SYSTEM W/8MB RAM	*BASIC SYS W/4MB RAM +210MB HDD + SVGA CARD & FREE DOS 6.x	*BASIC SYS W/8MB RAM +540MB HDD + SVGA CARD & FREE DOS 6.x	*BASIC SYS W/4MB RAM +210MB HDD + SVGA CARD + 14" SVGA .28 NI MONITOR & FREE DOS 6.x	*BASIC SYS W/8MB RAM +540MB HDD + SVGA CARD + 14" SVGA .28 NI MONITOR & FREE DOS 6.x
						{ 420MB HDD ADD $40 }	{ 850MB HDD ADD $60 }	{ 420MB HDD ADD $40 }	{ 850MB HDD ADD $60 }
P5-100/256C PCI USA	$228	$898	N/A	$1,188	$1,348	$1,378	$1,578	$1,568	$1,768
P5-90/256C PCI USA	228	728	N/A	1,018	1,178	1,208	1,408	1,398	1,598
P5-75/256C PCI USA	228	548	N/A	838	998	1,028	1,228	1,218	1,418
P5-100/256C PCI (Intel M/B)	328	988	N/A	1,288	1,448	1,478	1,678	1,668	1,868
P5-90/256C PCI (Intel M/B)	298	798	N/A	1,088	1,248	1,278	1,478	1,468	1,668
P5-75/256C PCI (Intel M/B)	298	618	N/A	918	1,078	1,108	1,308	1,298	1,498
P5-100/256C VLB-PCI	174	848	N/A	1,138	1,328	1,328	1,528	1,518	1,718
P5-90/256C VLB-PCI	174	668	N/A	958	1,118	1,148	1,348	1,338	1,538
P5-75/256C VLB-PCI	174	498	N/A	788	948	978	1,178	1,168	1,368
P5-66/256C VLB-PCI	118	398	N/A	688	848	878	1,078	1,068	1,268
P5-60/256C VLB-PCI	118	348	N/A	638	798	828	1,028	1,018	1,218
486DX2-66/256C VLB (Genoa M/B)	118	208	N/A	498	658	688	888	878	1,078
486DX2-66/256C VLB-PCI	118	208	358	478	628	668	858	858	1,048
486DX2-50/256C VLB-PCI	118	198	348	468	618	658	848	848	1,038
486DX4-100/128C VLB	84	248	398	518	668	708	898	898	1,088
486DX2-80/128C VLB	84	184	338	458	608	648	838	838	1,028
486DX2-66C VLB	68	158	308	438	588	628	818	818	1,008
486DX2-50C VLB	68	150	300	428	578	618	808	808	998
486BL-75/256C VLB (IBM M/B)	N/A	198	348	468	618	658	848	848	1,038
486SLC2-66/64C VLB (IBM M/B)	N/A	114	268	388	538	578	768	768	958
486DX2-66C ISA	58	148	298	428	578	618	808	808	998
486DX2-50C ISA	58	140	290	418	568	608	798	798	988
486DLC-40/128C ISA	N/A	98	248	368	518	558	748	748	938
486SLC-33 ISA	N/A	64	218	338	488	528	718	718	908
386DX-40/128C	N/A	88	224	358	508	548	738	738	928
386SX-40	N/A	54	208	328	478	518	708	708	898

*BASIC SYSTEM: MOTHERBOARD & CPU, 1MB RAM, IDE WITH I/O, 1.44MB FDD, CASE WITH POWER SUPPLY, AND 101-KEY KEYBOARD.

HI-TECH DELUXE MULTIMEDIA

- Motherboard w/CPU
- **4MB RAM**
- **420MB Fast IDE Hard Drive**
- 1.44MB 3.5" Floppy Drive
- VLB or PCI IDE Controller with I/O
- Enhanced Case w/Power Supply
- VLB or PCI SVGA Card w/1MB
- **14" SVGA .28 Non-interlaced Monitor**
- Focus 2001 Keyboard
- **Double Speed CD-ROM**
- 16-Bit Sound Card & Speakers
- **Free CD Deluxe Pak**
- Microsoft Compatible Mouse w/Pad
- Microsoft Windows 3.x
- Free DOS 6.x

486SLC-66/64K VLB (IBM M/B)	$1,048
486BL-75/256K VLB (IBM M/B)	1,128
486DX2-50/128K VLB	1,078
486DX2-66/128K VLB	1,088
486DX2-66/256K VLB-PCI	1,138
486DX2-80/128K VLB	1,108
486DX4-100/128K VLB	1,168

UPGRADES

540MB Hard Drive	Add $20
850MB Hard Drive	Add 80
1.2GB Hard Drive	Add 190
15" Non-Interlaced Monitor	Add 80
17" Non-Interlaced Monitor	Add 360

HI-TECH BEST BUY SYSTEM

- Motherboard w/CPU
- **4MB RAM**
- **210MB Fast IDE Hard Drive**
- 1.44MB 3.5" Floppy Drive
- IDE 2HD/2FD Controller with I/O
- Enhanced Case w/Power Supply
- VLB or PCI SVGA Card w/1MB
- **14" SVGA .28 Non-interlaced Monitor**
- 101-Key Enhanced Keyboard
- Enhanced Case w/Power Supply
- Microsoft Compatible Mouse w/Pad
- Free DOS 6.x

386SX-40 ISA	$708
386DX-40/128K ISA	748
486SLC-33 ISA	718
486SLC2-66/64K VLB (IBM M/B)	778
486DX2-50/128K ISA/VLB	798/808
486DX2-66/128K ISA/VLB	808/818
486DX2-66/256K VLB-PCI	848
486DX2-80/128K VLB	838
486DX4-100/128K VLB	898

UPGRADES

Microsoft Windows 3.x	Add $60
420MB Hard Drive	Add 30
540MB Hard Drive	Add 40
850MB Hard Drive	Add 100
15" Non-Interlaced Monitor	Add 80

HI-TECH DREAM SYSTEM

- Motherboard w/CPU
- 256KB External Cache
- **8MB RAM**
- **540MB Fast IDE Hard Drive**
- 1.44MB 3.5" Floppy Drive
- VLB or PCI IDE Controller with I/O
- VLB or PCI SVGA Card w/1MB
- **14" SVGA .28 Non-interlaced Monitor**
- Keytronics Keyboard
- Enhanced Case w/Power Supply
- Microsoft Compatible Mouse w/Pad
- Free DOS 6.x

Genoa 486DX2-66/256K VLB	$1,068
Asus 486DX2-66/256K VLB-PCI	1,108
Asus 486DX2-80/256K VLB-PCI	1,128
Asus 486DX4-100/256K VLB-PCI	1,188
P5-60/256K VLB-PCI	1,208
P5-66/256K VLB-PCI	1,308
P5-75/256K VLB-PCI	1,408
P5-90/256K VLB-PCI	1,578
P5-100/256K VLB-PCI	1,758

UPGRADES

Microsoft Windows 3.x	Add $60
850MB Hard Drive	Add 60
1.2GB Hard Drive	Add 170
15" Non-Interlaced Monitor	Add 80
28.8 Internal Fax Modem	Add 90

HI-TECH SUPER P5 SYSTEMS

- Intel Pentium™ Processor with Fan
- 256KB External Cache
- **8MB RAM**
- **540MB Fast IDE Hard Drive**
- 1.44MB 3.5" Floppy Drive
- PCI IDE Controller with I/O
- Diamond Stealth 64 PCI with 1MB
- **15" 1280•1024 .28 Monitor**
- Keytronics Keyboard
- Medium Tower Case w/Power Supply
- Microsoft Serial Mouse w/Pad
- Free DOS 6.x

P5-75 PCI (Intel M/B)	$1,678
P5-90 PCI (Intel M/B)	1,848
P5-100 PCI (Intel M/B)	2,058
P5-75 PCI (Asus M/B)	1,618
P5-90 PCI (Asus M/B)	1,788
P5-100 PCI (Asus M/B)	1,968
P5-75 PCI (Micronics M/B)	1,698
P5-90 PCI (Micronics M/B)	1,868
P5-100 PCI (Micronics M/B)	2,048

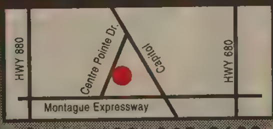
UPGRADES

Microsoft Windows 3.x	Add $60
850MB Hard Drive	Add 60
1.2GB Hard Drive	Add 170
17" Non-Interlaced Monitor	Add 280
28.8 Internal Fax Modem	Add 90

TERMS AND CONDITIONS

1. One year parts and labor warranty on systems.
2. Knowledgeable technical support engineers in service.
3. Prices and availability subject to change w/o notice.
4. Shipping, insurance and COD charges are extra and non-refundable. Prices reflect cash discounts.
5. Return shipping must be insured, prepaid and bearing an RMA# on the shipping label.
6. Defective items replaced or repaired at our discretion.
7. No responsible for typos.
8. All returns subject to 15% restocking fee and cover only Hi-Tech USA brand computers, excludes peripherals and software. No refunds after 30 days.
9. Superior reputation for service, quality and value.
10. Purchase orders are welcomed and subject to approval.

SOUTH BAY



Phone (408) 262-8688
1558 & 1562 Centre Pointe Drive
Milpitas, CA 95035 Fax (408) 262-8772

SALES HOURS
Mon-Fri: 8:30am-6pm
Sat: 10am-4pm

HI-TECH USA

SERVICE HOURS
Mon-Fri: 9am-5:30pm
Sat: 10am-3:30pm

PENINSULA

Holly
E. Camino Real
Whipple Ave
Industrial Road
HWY 101

Phone (415) 508-8688
981B Industrial Road
San Carlo, CA 94070 Fax (408) 508-0383

HI-TECH USA

(408) 262-8688 Milpitas
(415) 508-8688 San Carlos

CASE W/POWER SUPPLY

200W / 230W Power Supply	$34 / 38
250W / 300W Power Supply	48 / 60
Mini Tower Case w/200W Power Supply	**35**
Desktop AT Case w/200W Power Supply	45
Medium Tower Case w/230W Power Supply	60
Full Tower Case w/250W Power Supply	76
UPS APC 280VA / 400VA / 600VA	104 / 146 / 238

CONTROLLERS

I/O (2S / 1P / 1G)	**$10**
IDE 2FD/2HD with 2S/1P/1G	**10**
PCI IDE with I/O	**34**
VLB IDE with I/O	**17**
Enhanced I/O (2S/1P) w/16550 UART Chip	23
IDE I/O (2S/1P) w/16550 UART Chip	23
VLB IDE I/O (2S/1P) w/16550 UART Chip	**33**
BusLogic 445C VLB (SCSI)	190

adaptec

1522 (SCSI)	**$68**
1542CF (SCSI)	**164**
1542CFK w/Kit (SCSI)	**228**
2742T EISA (Twin SCSI)	208
2842 VLB SCSI	**196**
2940 PCI	**192**
2940W (Wide SCSI)	248

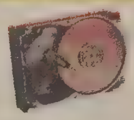
DATA TECHNOLOGY CORPORATION

DTC 2280+ ISA IDE w/16550 UART Chip	$26
DTC 2278 VLB IDE	24
DTC 2278+ VLB IDE W/16550 UART Chip	36

PROMISE TECHNOLOGY,INC.

Promise DC-200 IDE Cache Controller	**84**
Promise DC-420 VLB w/512K Cache	96
Promise DC-2300 Plus VLB IDE Fast I/O	47
Promise DC-4030 VLB IDE Cache Controller	**93**
Promise DC-5030 PCI IDE 0-16MB Cache	**13**

HARD / FLOPPY DRIVES



Quantum™ Maxtor® Seagate MICROPOLIS CONNER WESTERN DIGITAL

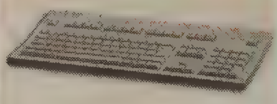
HARD DRIVES

210MB 14MS IDE	$132
270MB 15MS IDE	142
420MB 14MS IDE	**156**
540MB 14MS IDE	**168**
850MB 12MS IDE	**228**
1.0GB 10MS IDE	**318**
1.2GB 10MS IDE	**338**
200MB 13MS SCSI	158
540MB 12MS SCSI	204
1.0GB 13MS SCSI	**444**
1.8GB 13MS SCSI	**768**
2.0GB 13MS SCSI	**854**

FLOPPY DRIVES

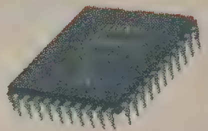
Teac 1.2 / 1.44 Floppy Drive	$40 / 30
Mitsumi 1.2 / 1.44 Floppy Drive	**39 / 28**
TEAC Dual Floppy Drive	**83**
3.5" DS/HD High Density Diskettes 10 Pack	**4**

KEYBOARDS



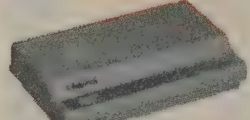
101 Enhanced Keyboard	$13
FOCUS	
FK2001 101-Key Click	**28**
FK7000 w/Trackball	34
FK8000 w/Calculator	35
FK9000 Programmable w/Calculator	43
Keytronics 101-Key Enhanced	**22**
Mitsumi 101-Key Enhanced	**13**
Maxiswitch 101-Key Enhanced	**19**
Maxipro II Programmable	44
Microsoft Natural Key	**88**
NORTHGATE	
OMNI 101 NI	**$62**
OMNI 102	**62**
OMNI Ultra	**82**

MATH COPROCESSORS



387DX-40 Tube	**$22**
387DX-40 Box	**32**
387DX-33 Tube	**10**
387DX-33 Box	**32**
387SX-40 Tube	22
387SX-40 Box	32
387SX-33 Tube	**22**
387SX-33 Box	**32**

MODEMS & FAXES



US ROBOTICS	
Sportster 14,400 Fax Modem Internal	**$88**
Sportster 14,400 Fax Modem External	108
Sportster 28.8 Fax Modem Int	188
Sportster 28.8 Fax Modem w/V.34 Int	**214**
Sportster 28.8 Fax Modem w/V.34 Ext	234
Fax Modem (9600 Fax/2400 Modem)	**25**
Fax Modem 14,400 Internal	**44**
Fax Modem 14,400 External	63
Fax Modem 14,400 w/Voice Internal	**53**
Fax Modem 28.8 Internal	**89**
Fax Modem 28.8 External	125
Fax Modem 28.8 with V.34 Int.	**116**
Fax Modem 28.8 with V.34 Ext	139
Hayes 14400 Fax Modem Int/Ext	88 / 108
PCMCIA Fax Modem (14,400) for Notebook	**104**

MOUSE/SCANNERS

3-Button Mouse Microsoft Compatible	**$6**

LOGITECH

First Mouse	$25
Mouseman Serial (Original)	**40**
Mouseman Bus (Original)	**62**
Trackman	72
Scanman 256 Gray Scale	148
Scanman Color	258

Microsoft

Microsoft Mouse Serial (w/System)	**$22**

MONITORS

14" Mono	**$68**
14" VGA Mono	83
14" Super VGA 1024•768 .39	**168**
14" Super VGA 1024•768 .28 Int	184
14" Super VGA 1024•768 .28 NI	**196**
15" Super VGA 1280•768 .28	274
17" Super VGA 1280•768 .28	**554**

CTX

14" Super VGA 1024•768 .28 Int	$210
14" Super VGA 1024•768 .28 NI	218
15" Super VGA 1280•1024 .28	**310**
17" CPS1765GM 1280•1024 .27	594

Impression

3 14" 1024•768 .28 Int.	$196
3 Plus 14" 1024•768 .28 NI	210
7 17" 1280•1024 .26 NI	568

MAG INNOVISION

15F 15" 1280•1024 .28	**$334**
17F 17" 1280•1024 .26	**594**

NANAO®

F550IW 17" 1280•1024 .28	**862**
F2-17 .28	848
F2-17EX .26	938
T2-17TS .25	988
T2-17 .25	1,248
T2-20 .30	1,898

NEC

3V 15" 1024•768 .28	**398**
Multisync XV 15	448
Multisync XE 15	524
Multisync XP 15	638
Multisync XV 17	758
Multisync XE 17	944
Multisync XP 17	1,184
Multisync XE 21	1,894
Multisync XP 21	2,328

OPTIQUEST

900S 14" 1024•768 .28	$246
1562A 15" 1024•768 .28 Flat	336
4000DS 17" 1280•1024 .27 Flat	646
2082DC 20" 1600•1280 .28	1,236

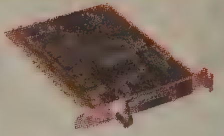
SONY

15SF 15" 1280•1024 .25 Green	**$402**
17SF 17" 1280•1024 .25	**822**
20SE1 20" 1600•1200 .30	1,748

ViewSonic®

6E 14" 1024•768 .28 Green	**$241**
15ES 15" 1024•768 .28	**325**
15G 15" 1280•1024 .28 60MHz	370
15 15" 1280•1024 .27 Green	400
17 17" 1600•1280 .27 Green	788
17E 17" 1280•1024 .28 Green	660
17G 17" 1280•1024 .28 Green	**678**
20G 20" 1600•1280 .28	1,220
21PS 21" 1600•1280 .25	**1,578**

NETWORKS



16 BIT Ethernet Cards (Coax)	**$24**
16 BIT Ethernet Cards (10 Base-T)	**24**
16 BIT Ethernet Cards (Combo)	**25**
16 BIT Ethernet Cards (Pocket for Notebook)	98

3Com

3C509 ELINK III Coax / 5 pack	$102 / 448
3C509 ELINK III TP / 5 pack	76 / 408
3C509 ELINK III Combo / 5 pack	116 / 488

ARC*net*

Bus Topology ISA Card (8 BIT / 16 BIT)	$38 / 42
Star Topology ISA Card (8 BIT / 16 BIT)	38 / 42

Hubs and Repeaters

8-Port 10 Base T HUB (w/BNC)	$118
16-Port 10 Base T HUB (w/BNC, AUI)	258

PRINTERS

brother

HL-630 / HL-645	$394 / 434
HL-655M / HL-660	564 / 664

CITIZEN™

GSX-190 (9-Pin) / GSX-220 (24-Pin)	**$156 / 166**
GSX-230 / GSX-240 (24-Pin) Quiet	**208 / 284**
GSX-245 (24-Pin) Wide	348
Color Option for Citizen Printers	48 / 68

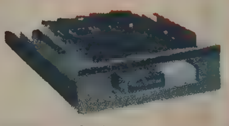
HEWLETT PACKARD

HP DeskJet 540 / 560C	**$284 / 464**
HP LaserJet 4 / 4 Plus	1,218 / 1,366
HP LaserJet 4L / 4P	638 / 926
HP LaserJet 1200C / 4MP	1,048 / 1,328

Panasonic Office Automation OA

KX-P1150 (9-Pin)	**$128**
KX-P2023 (24-Pin) Quiet	**170**
KX-P3624 (24-Pin) Wide	398
Color Upgrade Kit KX-PCK11	52

TAPE BACKUPS



AIWA 250MB Internal w/Tape	**$96**
Conner 420MB Internal	**154 (w/tape 162)**
Conner 850MB Internal	258

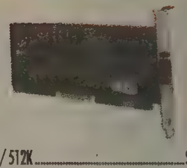
COLORADO MEMORY SYSTEMS

DJ-20 250MB/DJ-35 350MB Internal	**$128 / 154**
DJ-25 700MB Internal	**258**
Tape QIC-80 3M DC2120	**12**
JT-20 Trakker 250MB Ext	258
JT-35C Trakker 350MB Ext	312

SOFTWARE

Microsoft DOS 6.x (with System)	$44
Microsoft Professional 4.3 (with System)	488
Microsoft Windows 3.x (with System)	60
Microsoft Windows for Workgroup (with System)	70
Microsoft Home Bundle (Encarta, Golf, Money, Works Entertainment Pack, Home Sampler, Dangerous Creature (with System)	**88**

VGA CARDS



VGA 256K / 512K	$28 / 38
SVGA 1MB 1024•768 16 BIT	**56**
S3-805 VLB w/1MB	**65**
Trident VLB w/1MB	**65**
Trident PCI w/1MB	**70**

ATI TECHNOLOGIES INC

Wonder PCI / VLB 1MB DRAM	**$93**
Ultra Plus PCI / VLB / ISA 2MB DRAM	158
Ultra Pro PCI 2MB VRAM (Mach 32)	**210**
Ultra Pro VLB 2MB VRAM (Mach 32)	**210**
WinBoost PCI 1MB DRAM (Mach 64)	**135**
WinBoost VLB 1MB DRAM (Mach 64)	**135**
WinBoost PCI 2MB DRAM (Mach 64)	**175**
WinBoost VLB 2MB DRAM (Mach 64)	**175**
WinTurbo 64 PCI 2MB VRAM (Mach 64)	**246**
WinTurbo 64 VLB 2MB VRAM (Mach 64)	**246**
WinTurbo 64 PCI 4MB VRAM (Mach 64)	**440**
WinTurbo 64 VLB 4MB VRAM (Mach 64)	**440**

DIAMOND

Speed Star SE PCI / VLB 1MB DRAM	$89
Speed Star SE PCI / VLB 2MB DRAM	138
Stealth 64 PCI 1MB (DRAM)	**112**
Stealth 64 VLB 1MB (DRAM)	**114**
Stealth 64 PCI 2MB (DRAM)	**154**
Stealth 64 VLB 2MB (DRAM)	**156**
Stealth 64 PCI 2MB (VRAM)	**259**
Stealth 64 VLB 2MB (VRAM)	**259**
Stealth 64 PCI 4MB (VRAM)	**388**
Stealth 64 VIB 4MB (VRAM)	**396**
Viper 2MB VLB (VRAM)	**208**
Viper-Pro PCI 2MB / 4MB (VRAM)	**348 / 478**

Genoa SYSTEMS CORPORATION

8500 VLB 1MB	**$85**

ORCHID

Fahrenheit 1MB (S3-801) ISA	$88
Fahrenheit 64 PCI /VLB 1MB (DRAM)	126
Fahrenheit 64 PCI /VLB 2MB (DRAM)	172
Fahrenheit 64 Pro PCI / VLB 2MB (VRAM)	268
Fahrenheit 64 Pro PCI / VLB 4MB (VRAM)	398
Kelvin EZ PCI / VLB VLB 1MB (DRAM)	94 / 94
Kelvin ISA 1MB	**120**
Kelvin VLB (64-Bit) 1MB / 2MB	**116 / 164**
Kelvin PCI (64-Bit) 1MB / 2MB	**116 / 164**

Intel, Intel Inside and Pentium are registered trademarks of the Intel Corporation.

Microsoft is a registered trademark and Windows and the Windows logo are trademarks of Microsoft Corporation.

All other trademarks, logos are property of their respective companies.

486 MULTIMEDIA NOTEBOOKS

intel inside

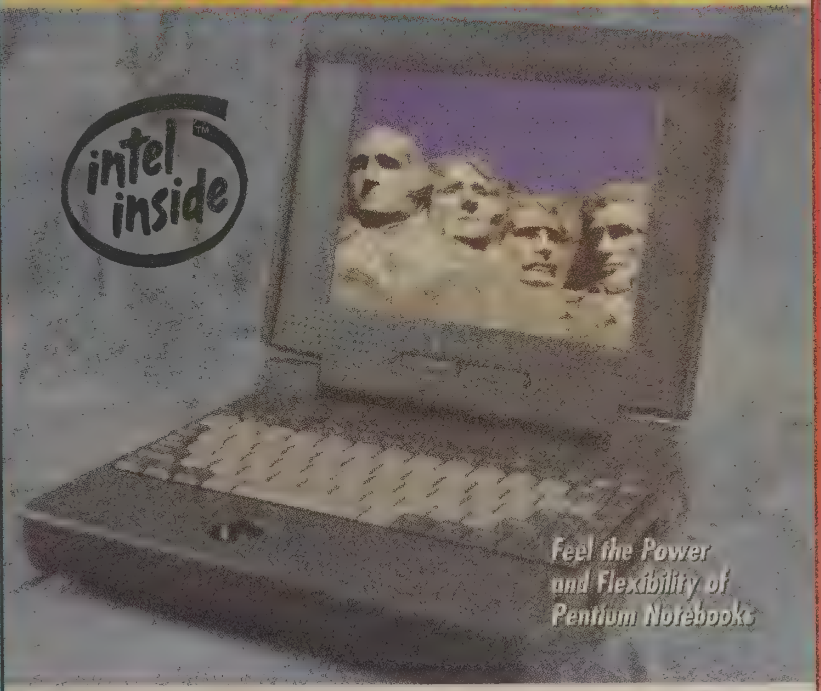
Soar to New Heights with our Incredible 486 11.3" DSTN Color Notebook

STANDARD CONFIGURATIONS

- **4MB RAM (expandable to 32MB)**
- **340MB Hard Drive**
- 32-BIT VL Bus Windows Accelerator
- **Large 10.5" Screen (Dual Scan)**
- 1MB Video Memory
- Built-In Trackball
- Carrying Case
- Built-in Sound Card and Speaker
- NIMH Battery
- One Type III or Two Type II PCMCIA Slots
- FREE DOS 6.x
- Docking Station Option

SUPER SALES	VGA Mono	Dual Scan Color	Active Matrix Color
486DX2-50	$1,348	$1,788	$2,328
486DX2-66	1,378	1,818	2,348
486DX4-100	1,468	1,908	2,438

SUPER PENTIUM NOTEBOOKS



Feel the Power and Flexibility of Pentium Notebooks

STANDARD CONFIGURATIONS

- **8MB RAM (expandable to 32MB)**
- **340MB Hard Drive**
- 32-BIT VL Bus Windows Accelerator
- **Large 10.5" Screen (Dual Scan)**
- 1MB Video Memory
- Built-In Trackball
- Carrying Case
- Built-in Sound Card and Speaker
- NIMH Battery
- One Type III or Two Type II PCMCIA Slots
- FREE DOS 6.x
- Docking Station Option

SUPER SALES	Dual Scan Color	Active Matrix Color
P5-75	$2,348	$2,948
P5-90	2,528	3,128
P5-100	2,748	3,348

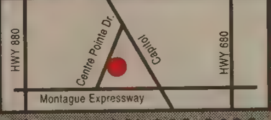
EXTRA VALUE NOTEBOOK UPGRADES

To 8MB / 12MB / 16MB / 32MB	SCALL
To 510MB / 700MB / 810MB Hard Drive	Add $120 / 260 / 330
PCMCIA Dual-Speed CD-ROM	Add $260
PCMCIA Fax Modem 14,400 or 28.8	Add $110 or $295
PCMCIA LAN Adapter (10Base-T & Twist)	Add $140
Extra NIMH Battery Pak	Add $120
Extra AC Adapter	Add $88
Docking Station	Add $420
Maxtor MobilMax Flash Memory Cards	
1MB / 2MB / 4MB / 8MB	Add $99 / 159 / 239 / 379
10MB / 12MB / 16MB / 20MB	Add $449 / 509 / 639 / 769
Maxtor MobilMax PCMCIA Hard Drives	
105MB / 131MB / 171MB	Add $299 / 329 / 389
Maxtor MobileMax Deskrunner Single Internal PCMCIA type III Card Socket for Desktop PCs	Add $95

TERMS AND CONDITIONS

1. One year parts and labor warranty on systems.
2. Knowledgeable technical support engineers in service.
3. Prices and availability subject to change w/o notice.
4. Shipping, insurance and COD charges are extra and non-refundable. Prices reflect cash discounts.
5. Return shipping must be insured, prepaid and bearing an RMA# on the shipping label.
6. Defective items replaced or repaired at our discretion.
7. No responsible for typos.
8. All returns subject to 15% restocking fee and cover only Hi-Tech USA brand computers, excludes peripherals and software. No refunds after 30 days.
9. Superior reputation for service, quality and value.
10. Purchase orders are welcomed and subject to approval.

SOUTH BAY



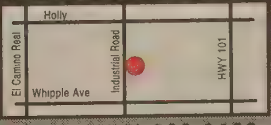
Phone (408) 262-8688
1558 & 1562 Centre Pointe Drive
Milpitas, CA 95035 Fax (408) 262-8772

SALES HOURS
Mon-Fri: 8:30am-6pm
Sat: 10am-4pm

HI-TECH USA

SERVICE HOURS
Mon-Fri: 9am-5:30pm
Sat: 10am-3:30pm

PENINSULA



Phone (415) 508-8688
981B Industrial Road
San Carlo, CA 94070 Fax (408) 508-0383

ADVERTISER BY CITY INDEX

For your convenience, here is a list of advertisers by county and city. Please see the advertiser index on page 352 for the page number of the advertisement.

Alameda County

Albany
PC Ten
UMiracle MicroSystems

Berkeley
Domino Computer Self Service Centers
Photo Drive Up
M.A.C.
McTek Systems
Winners Circle Systems

Dublin
Comtek Computer
Soft Solutions

Fremont
A&A Technology
Acme Micro Systems
America Computers
Bold Data Technology
Caliber Computers
California LS
CompExpress
Dennis Int.
Domino Computer
Elma
Empac
FRY's Electronics
Gigabytes
Golden Micro Computers
J&K Technology
Logitech Factory Outlet
Micro Service Center
MicroWest
Mobil Technology Products
NCA Computer Products
New River
SK Systems
Songtech
UMiracle MicroSystems
USM Systems
Utron

Hayward
Computer Source of Hayward
Cypress Computer
Domino Computer Self Service Centers
MCT, Multi Connection Technology
Pars International

Newark
SCSI Works Computer Products

Oakland
California Internet
Domino Computer
PC Ten

Pleasanton
AT&T Training
Domino Computer

Union City
Granite Digital

Contra Costa County

Concord
AIM Computers
Backyard Computer Services
Domino Computer Self Service Centers
Nordic Computers

El Cerrito
HD Computers
Innocom Systems
Perfect Solutions Multimedia

Lafayette
EFI's Discount Computer

Pleasant Hill
Paramont Computers

Richmond
Evergreen Computer

San Pablo
Computer Applications Co.

San Ramon
Domino Computer Self Service Centers
Nordic Computers

Walnut Creek
Alpha Fine Furniture
CompuMart
Systems Unlimited

Marin County

Mill Valley
Marketpro Shows

Novato
BCSA Computers

San Rafael
Domino Computer Self Service Centers
Hi-Q Systems

Sacramento County

Sacramento
Computer Leap
The Computer Store
Domino Computer Self Service Centers
Evernet Education Services
Halted Specialties
HD Computers
Hi-Q Systems
Whole Earth Access

San Francisco County

San Francisco
ACTNET Computers
Beta Nineties Computer, Inc.
California Computer Company
California LS
Center For Electronic Arts
Clarity Teknowlogy
Compudata
CPU & Memory Exchange Club
CRL
Domino Computer Self Service Centers
Evernet Education Svcs.
HD Computers
Hooked
Horizon Training
Internet Literacy Consultants
ITS CD
Konicom Computers
Lantrek Networks, Inc.
Laptop Superstore
Now Electronics
San Francisco Computer Center
USM Systems

San Joaquin County

Stockton
Hi-Q Systems

San Mateo County

Belmont
UMiracle MicroSystems

Burlingame
Envisions Solutions Technology
Robert Austin Corporation

Daly City
Domino Computer Self Service Centers

Foster City
Laitron Computers
Megamex

Millbrae
Domino Computer Self Service Centers

San Bruno
Comtek

San Carlos
Belmont Systems, Inc.
Computer Show & Sale
Hi-Tech USA

San Gregorio
ISDN Tek

San Mateo
CBM Computers
Now Electronics
Whole Earth Access

South San Francisco
Beta Nineties Computer, Inc.
Computerland of Serramonte
FastLink Network Products
Promedia, Inc.
Universal Computer Products
USM Systems

Woodside
Net Plus

Santa Clara County

Campbell
Domino Computer Self Service Centers
Fry's Electronics

Cupertino
Aimnet
Cupertino Computer

Los Altos
Domino Computer Self Service Centers
EZCom
IQ INFoQuest Computer

Los Gatos
Silicon Solutions

Menlo Park
Alpha CD Imaging
Internet Roundtable Society

Milpitas
Art Multimedia Systems
Bay Computer
Beta Nineties Computer, Inc.
Comand Line Computers
Art Computer Tech
Domino Computer Self Service Centers
Elpin Systems
Great Mall Computers
Hi-Tech USA
Linden Microtech
Lumis International
Netis Technology
Supercom
Vancom Systems House
Wedge Technology
World Net Microsystems
V88 Systems

Mt. View
Best Internet Comm., Inc.

Palo Alto
Access Computer
Cardservice International
FRY's Electronics
NCA Computer Products
Palo Alto Micro
PC Warehouse

San Jose
Appro International
ARM Computer
AMT International
Big Bang Technology
CGI Technology
Chicotec
Clarity Tech
Digital Data Express
Domino Computer Self Service Centers
FineTec
Golden Gate Computer
Golden Valley Systems & Networks
International Module Design
JDR Microdevices
Laitron Computers
Matrix Info Systems
Megatek
Miracle Computers
NCA Computer Products
Paramount
Pixel/USA
Prestige Computer
Spider Graphics
Truecomp America
WIT International

Santa Clara
Access Computer Technologies
ASA Computers
BG Computers
Central Computer
C & J Computer
Commendline Computers
Computer Express
Comtek Computer
CPU & Memory Exchange Club
Cypress Computer
Domino Computer Self Service Centers
Greenleaf Int'l
Halted Specialities
Hitron Systems
Internex • Tiara
IST Inc.
Jac Industrial
Jemini Electronics
Laptop Superstores
Novell
Pacific Computer Products
PC Warehouse
Precision Graphics
PSC Computing
Rainbow Computer
Sonic Computer
Storage Systems Engineering
Symphony Computer
Technoland
Transwell Communications
USM Systems

Sunnyvale
American Multi Systems
Aroma Computer
Baytron Computers
Cables & Accessories
Cardware Labs
CompuRun Systems
CSI
Disk Drive Depot
Domino Computer Self Service Centers
FRY's Electronics
GT Computers
HD Computers
Hi-Q Systems
HKG Computers
Kudonet
LTI Leopard Technology
NCA Computer Products
Network Associates
PromoX Systems
Schwab Computer
Top Data
Vertex Technology
United Microsytems
USM Systems

Santa Cruz County

Capitola
Libre Service Computer, Inc.
Paper Image Inc.

Solano County

Vallejo
Domino Computer Self Service Center

Sonoma County

Cotati
Halted Specialities

Petaluma
Pacific Coast Show Productions

Stanislaus County

Fresno
HD Systems

Modesto
Aroma Computer

Out of State

Computer Discount Warehouse
IPC

CompuMart

Quality, Service and Value!

Experience it in our Ultra Modern Showroom

COMPLETE PC SYSTEMS, UPGRADES & SERVICES

486DX2-66/4MB/540HD/SVGA	**$999**
486DX2-80/4MB/540HD/SVGA	**$1049**
486DX4-100/4MB/540HD/SVGA	**$1099**
P-5-66/8MB/540HD/SVGA	**$1579**
P-5-75/8MB/540HD/SVGA	**$1699**
P-5-90/8MB/540HD/SVGA	**$1999**
P-5-100/8MB/540HD/SVGA	**$2049**

All systems include SVGA Monitor

SYSTEM UPGRADES

Processor, Memory,
Hard Drive, CD-ROM...

NOTEBOOK PC

COMPAQ, EPSON, NEC, TI, TOSHIBA

CALL FOR PRICES!

NETWORK SERVICE

Server and Workstation Installation, and Cabling for DOS, Windows, Netware, OS/2, Windows NT, Lantastics, Personal Netware.

We offer solutions for Network Administration, Backups for Business Applications...plus E-Mail, CD-ROMs, Remote LAN Access, Printing and FAX.

HARD DRIVES

Conner	420/540MB IDE	$179/$195
	850/1.2GB IDE	$279/$389
	1.GB SCSI	$469
WD	540MB IDE	$229
	1.08/1.2GB IDE	$349/$389
Maxtor	850/1.2GB IDE	$269/$389
Quantum	420/540MB IDE	$179/195
	730MB IDE	$249
	540/2.1GB SCSI	$229/895

MONITORS

ADI	3E	14"	.28 NI LR	$274
	5EP	17"	.28 NI LR	$619
KFC		15"	.28 1024x768	$289
		17"	.26 1280x1024	$669
MAG	DX15F	15"	.28 1028x768	$339
	DX17F	17"	.26 1280x1024	$605
Sony	15SF	15"	.28 1280x1024	$419
	17SF	17"	.28 1280x1024	$859
NEC	XE15	15"		$579
	XP15	15"		$679
	XE17	17"		$989
	XP17	17"		$1229
	XV17	17"		$769
Viewsonic	6E	14"	.28 1024x768	$254
	15G	15"	.28 1024x768	$369
	17G	17"	.28 1280x1024	$689
	21PS	21"	.27 1280x1024	$1609

NETWORK PRODUCTS

3COM	509 Etherlink III	$89
Artisoft	Lantastic 6.0 Starterkit/2 Users	$245
	Lantastic 2000	$167
Intel	Etherexpress 16	$89
Novell	Personal Netware	$75
	Netware 3.12 5 Users/10 Users	$605/$1319
	Netware 3.12 25 Users/50 Users	$1975/$2725
SMC	Elite Plus 16	$125
	Elite Ultra 16TP/Coax	$97
Cheyenne		
	ARCserve/FAXserve	Call

SCANNERS

HP	ScanJet IIP/ IIIC	$ 499/$929
Logitech	Scanman 256	$159
	Scanman Color	$199
Microtek	Scanmaker IIGS	$579
	Scanmaker IISPX	$875
Musteck	ColorArtist Scanner	$229

MULTIMEDIA & CD-ROM

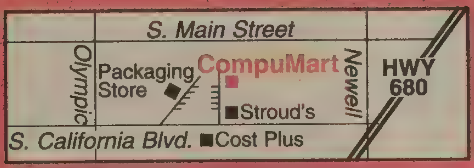
Creative Lab	Sound Blaster 16 Value	$85
	Sound Blaster 16 SCSI	$129
	Sound Blaster 16 SCSI ASP	$209
	Sound Blaster 16 MCD	$109
	Wave Blaster	$179
	Sound Blaster AWE32 Value	$239
	Discovery CD 16	$269
	Digital Schoolhouse	$279
	Edutainment 16	$395
	Value CD	$245
Mitsumi	Quad Speed CD-ROM	$199
NEC	CDR-501 4Xi CD-ROM	$395
	CDR-601 4Xe Ext	$489
	CDR-510 3Xi OEM	$205
	3Xp Portable Plus	$415
	3Xe CD-ROM Ext	$479
Panasonic	Double Speed CD-ROM	$125
Plextor	Quad Speed CD-ROM	$479
	Double Speed CD-ROM	$195
Toshiba	Quad Speed CD-ROM 3601	$299
Sony	CDU55E	$125
	CDU55S SCSI	$199
Teac	Super Quad	$189

CONTROLLERS

Adaptec	1505/1510A SCSI /CD	$59/$69
	T348/T358 Mini SCSI	$129/$165
	1542C/1542CK SCSI	$179/$239
	2742/2842 SCSI	$345/$225
	2940/2940W PCI/SCSI	$229/$249
	460 PCMCIA/ SCSI	$289
Buslogic	545C/ 445C ISA/VL	$199/$199
	747S/946C ELSA/PCI	$329/$265
	410/ 510 VL/ISA IDE C	$135/$99
	910A PCI/IDE Cache	$40
Promise	DC200/DC420 IDE Cache	$105/$109
	DC2040/DC4030VL	$159/$119

TAPE BACK-UP

Colorado	350/680 Int	$179/$319
	350/680 Ext	$339/$479
Conner	420/850 Int	$185/$279
	420/850 Ex	$339/$409
HP	35480 DAT 4-8GB SCSI	$829



VIDEO BOARDS

ATI	Graphic Win Pro 2MB/4MB	$275/$465
	Graphic Xpression 1MB/2MB	$175/$215
	Graphic Pro Turbo 2/4MB	$395/$599
Diamond	Stealth 64 1MB/2MB Dram	$149/$189
	Stealth 64 2MB/4MB Vram	$275/$465
	Viper Pro 2MB	$315
Herculus	Dynamite Pro 1MB/2MB	$169/$219
Orchid	Kelvin 64 1MB/2MB	$145/$189
Number 9	GXe64 1MB/2MB	$199/$259
	GXe64 Pro 2MB/4MB	$355/$529
Matrox	MGA Xpression+ 2MB PCI	$369

PRINTERS

Cannon	BJ-10SX	$259
	BJ-200ex/BJC 4000	$239/$359
Brother	HL 630	$379
HP	320/540	$299/$289
	LaserJet 4L/4P/4+	CALL
	OfficeJet	$759
Panasonic	KX-4400	$399
	KX-SP100 Fax/Prt/Copier	$769
Okidata	OL400e/OL410e	$399/$559
Action	Laser 1110	$389
Epson	Stylus Color Inkjet	$525
Fargo	Color Printer	$739

SOFTWARE

Corel	Corel Draw & CD for Windows V3	$415
Lotus	1-2-3 for Windows	$299
	1-2-3 4.0 Upgrade	$97
Microsoft	Excel V5.0 for Windows	$295
	Excel V5.0 for Windows Upgrade	$119
	Office for Windows V4.2	$465
	Office Upgrade	$265
	Word 6.0 for Windows	$289
	Word 6.0 Upgrade	$119
WordPerfect		
	WordPerfect 6.0 for Windows	$295
	WordPerfect Upgrade	$95

MODEMS

BOCA	14.4 Fax/Modem Int/Ext	$89/$124
Hayes	14.4 Fax/Modem Int /Ext	$94/$124
Practical P	14.4 Fax/Modem Int/Ext	$94/$114
	28.8 Fax/Modem v.34	$209/$229
US Robotics	14.4 Fax/Modem Int/Ext	$94/$124
	28.8 Fax/Modem V.34	$219/$239
Megherz	PCMCIA 28.8 Fax/Modem	$349
	PCMCIA 14.4 Fax/Modem	$189

All Prices are subject to change without notice.
We are not responsible for typographical errors.

(510) 946-1234

1320 S. California Blvd., Walnut Creek (Across from Cost Plus, next to Stroud's)

Monday-Friday: 9:30-8:00, Saturday: 10:00-7:00, Sunday: 12:00-6:00

Over 5,000 Software, Printers, Monitors, CD-ROM, Network Products, Computer Books, Magazines In Stock.

ADVERTISERS INDEX

AARDVARK COMPUTER SOLUTIONS ... 344
AT&T ... 72
ACCESS COMPUTER TECHNOLOGIES ... 160–167
ACME MICRO-SYSTEMS ... 331
ACTNET ADVANCED TECH CORP ... 250
AD MARK ... 282
AIM COMPUTERS ... 141
AIMNET ... 89
ALPHA CD IMAGING ... 270
ALPHA FINE COMPUTER FURNITURE ... 352
AMERICA COMPUTER ... 103
AMERICAN COMPUTER RESEARCH ... 211
AMERICAN MULTI SYSTEMS ... 13
AMT INTERNATIONAL ... 140
APPRO INTERNATIONAL ... 307
ARM COMPUTER, INC. ... 46
AROMA TECH, INC. ... 142–144
ART MULTIMEDIA SYSTEMS ... 153
ASA COMPUTERS ... 148–151
AUTHORIZED TECHNICAL SERVICES ... 269
AVISION LABS, INC. ... 112
BACKYARD COMPUTER SERVICES ... 286
BASON COMPUTER ... 352
BAY COMPUTER ... 291
BAYTRON COMPUTER ... 132
BCSA COMPUTERS ... 279
BELMONT SYSTEMS, INC. ... 146,147
BEST INTERNET COMMUNICATIONS ... 112
BETA NINETIES COMPUTER ... 17
BG COMPUTER ... 294
BIG BANG TECHNOLOGY ... 287
BOLD DATA TECHNOLOGY ... 25,99
BONANZA SHOW PRODUCTIONS ... 310
C & J COMPUTERS, INC. ... 136,137
C.G.I. TECHNOLOGY ... 210
CABLE & ACCESSORIES ... 300
CALIBER COMPUTER ... 172,173
CALIFORNIA COMPUTER COMPANY ... 29
CALIFORNIA COMPUTER EXPO ... 257
CALIFORNIA INTERNET ... 104
CALIFORNIA LS ... 45
CARDSERVICE INTERNATIONAL ... 78
CARDWARE LAB ... 56
CBM COMPUTERS ... 6
CENTER FOR ELECTRONIC ARTS ... 281
CENTRAL COMPUTER SYSTEMS ... 258–264
CHICOTEC ... 319
CLARITY TECHNOLOGIES ... 76
COMMEND LINE COMPUTER ... 19–21
COMP EXPRESS ... 55
COMPU DATA ... 249
COMPUMART ... 351
COMPURUN SYSTEMS ... 315
COMPUTER APPLICATIONS CO. ... 63
COMPUTER CARE ... 68
COMPUTERLAND OF SERRAMONTE ... 26
COMPUTERSOURCE OF HAYWARD ... 59
COMTEK COMPUTERS ... 311
CRL ... 102
CUPERTINO COMPUTER ... 10
CYPRESS COMPUTERS ... 51
DENNIS INTERNATIONAL ... 27
DIGITAL WORLD ... 155
DISK DRIVE DEPOT ... 3
DOMINO COMPUTER ... 5
EFI'S DISCOUNT COMPUTER ... 281
ELECTRO INTEGRATED TECHNOLOGY ... 293
ELMA ELECTRONICS ... 294
EMPAC INTERNATIONAL ... 105
ENVISIONS SOLUTIONS TECHNOLOGY ... 31
EVERGREEN COMPUTER INT'L ... 302–305
EVERNET EDUCATION SERVICES ... 54
EXCEL MICRO SOLUTIONS ... 72
EZ COM ... 212
FASTLINK NETWORK PRODUCTS ... 273
FINE TEC ... 27
FRY'S ELECTRONICS ... 2,177–207,355
FUTURE COMPUTING SOLUTIONS ... 283
GIGABYTES ... 256
GMI, INC. ... 90
GOLDEN MICRO COMPUTER ... 133
GOLDEN VALLEY SYSTEMS ... 58
GRANITE - DIGITAL ... 244
GREAT MALL COMPUTERS ... 152
GREENLEAF INTERNATIONAL ... 97
GT COMPUTER ... 125
HALTED SPECIALTIES ... 333
HD COMPUTER ... 34-43
HI-TECH USA ... 346–349
HIQUALITY SYSTEMS, INC. ... 113–117
HITRON SYSTEMS ... 316,317
HKG COMPUTERS ... 121
HOOKED ... 9
INNOCOM SYSTEMS ... 245
INPUT AUTOMATION ... 252
INTECH ... 72
INTERNATIONAL MODULE DESIGN ... 265
INTERNET LITERACY CONSULTANTS ... 107
INTERNET ROUNDTABLE SOCIETY ... 91
INTERNEX TIARA ... 87
IPC TECHNOLOGIES ... 22
IQ INFOQUEST COMPUTER ... 92,93
ISDN TEK ... 95
IST INC. ... 104
ITS CD ... 270
J & K TECHNOLOGIES ... 265
JAC INDUSTRIAL, INC. ... 64
JDR MICRODEVICES ... 71
JEMINI ELECTRONICS ... 288,289
KINGSTAR COMPUTER ... 11
KONICOM ... 248
KUDO NET ... 102
LAITRON COMPUTER ... 336,337
LAN TREK ... 66,67
LAP-TOP SUPERSTORE ... 81
LINDEN MICROTECH ... 175
LOGITECH FACTORY OUTLET ... 241
LTI LEOPARD TECHNOLOGIES ... 325
LUMIS INTERNATIONAL ... 10
M.A.C. ... 129
MARKET PRO ... 270
MAX GROUP ... 321
MCT ... 332
MCTEK SYSTEMS ... 329
MEGAMEX ... 6
MEGATEK ... 309
MICROWEST ... 22
MEI MICROCENTER INC./WINBOOK ... 7
MIC COMPUTER ... 255
MICRO SERVICE CENTER, INC. ... 108,109
MIRACLE COMPUTER ... 299
MOON ANGEL PRODUCTIONS ... 320
MULTI MICRO SYSTEMS ... 313
NCA COMPUTER PRODUCTS ... 213–238
NET PLUS ... 46
NETIS TECHNOLOGY ... 271
NETWORK ASSOCIATES CORP ... 131
NEW RIVER ... 123
NORDIC COMPUTERS ... 353
NOVELL ... 64
NOW ELECTRONICS ... 118,284,285
PACIFIC COMPUTER PRODUCTS ... 126,127
PALO ALTO MICRO ... 212
PAPER IMAGE, INC. ... 100,101
PARAMOUNT COMPUTER ... 295
PARS INTERNATIONAL COMPUTER ... 65
PC TEN ... 301
PC WAREHOUSE ... 77
PERFECT SOLUTION MULTIMEDIA ... 267
PIXEL USA COMPUTER ... 158,159
PRESTIGE COMPUTER ... 14,15
PROMEDIA, INC. ... 210
PROMOX SYSTEMS ... 253
RAINBOW COMPUTER ... 79
ROBERT AUSTIN CORP ... 48
SAN FRANCISCO COMPUTER CENTER ... 251
SCHWAB COMPUTER CENTER ... 138
SCSI WORKS ... 73–75
SEEWHY COMPUTER SYSTEMS ... 242
SIGMA COM ... 49
SILICON SOLUTIONS ... 107
SOFT SOLUTIONS ... 275
SONGTECH INTERNATIONAL, INC. ... 286
SONIC COMPUTER ... 323
SPIDER GRAPHICS ... 139
STORAGE SYSTEMS ENGINEERING ... 278
SUPERCOM ... 356
SYMPHONY COMPUTER ... 52,53
SYSTEMS UNLIMITED ... 70
TECHNOLAND ... 209
TOP DATA ... 327
TRANSWELL COMMUNICATION ... 272
TRUECOMP AMERICA,INC. ... 243
U-TRON TECHNOLOGIES ... 91
UMIRACLE MICROSYSTEMS ... 82–84
UNITED MICROSYSTEM, INC. ... 57
UNIVERSAL COMPUTER PRODUCTS ... 145
USM DISTRIBUTORS ... 296,297
V-88 SYSTEMS ... 88
VANCOM SYSTEM HOUSE ... 61
VANISHED CHILDREN'S ALLIANCE ... 112
VERTEX TECHNOLOGY ... 106
WEDGE TECHNOLOGY ... 134,135
WEST CON ... 242
WINNER'S CIRCLE ... 47
WIT INTERNATIONAL ... 111
WORLD-NET MICROSYSTEMS ... 334,335

This index is provided as an additional service. Although we do our best to maintain accuracy, the publisher does not assume liability for errors or omissions.

BASON COMPUTER 1•800•238•4453
HARD DRIVE WAREHOUSE
234 CARABEAN DR. SUNNYVALE CA, 94089
(408) 744-1611, FAX (408) 747-0954

3.0GB SCSI MICROPOLIS 1936 $849

540MB

MAKE	MODEL	SPEED	SIZE	INT/EXT
Maxtor	540MV IDE	12ms	3.5"LP	$179/329
Quantum	540A IDE	12ms	3.5"LP	$199/349
Quantum	540S SCSI	12ms	3.5"LP	$219/319
Seagate	3660A IDE	10ms	3.5"LP	$199/349
WD	2540 IDE	12ms	3.5"LP	$199/349
Conner	540A IDE	12ms	3.5"LP	$185/335
Conner	540S SCSI	12ms	3.5"LP	$209/359
750MB				
Quantum	730S SCSI	12ms	3.5"LP	$269/369
Quantum	730A IDE	12ms	3.5"LP	$249/399
850MB				
Maxtor	7850AV IDE	12ms	3.5"LP	$255/405
1.0GB				
Conner	1080S	10ms	3.5"LP	$479/579
Fujitsu	M1060	10ms	3.5"HH	$545/645
Seagate	31230N SCSI	10ms	3.5"LP	$525/625
Seagate	31220A IDE	12ms	3.5"LP	$375/525
WD	31000 IDE	10ms	3.5"LP	$349/499
HP	3323A SCSI	10ms	3.5"LP	$489/589
Quantum	31080S	10ms	3.5"LP	$465/565
1.2GB				
Conner	1275A IDE	12ms	3.5"LP	$385/535

NOTE:
IDE EXTERNAL DRIVES plug into PRINTER PORT and play.
CALL for prices on OTHER MODELS.
SPECIAL PRICES for SMALL CAPACITY IDE DRIVES.

1.7GB

MAKE	MODEL	SPEED	SIZE	INT/EXT
Micropolis	2217A IDE	10ms	3.5"HH	$599/749
Micropolis	2217 SCSI	10ms	3.5"HH	$779/879
Micropolis	2217 AV SCSI	10ms	3.5"HH	$875/975
2.0GB				
Conner	2105S SCS	18 ms	3.5"LP	$825/925
DEC	5200S SCSI	11ms	5.25"FH	$699/799
HP	3325A SCSI	9ms	3.5"HH	$849/949
Quantum	2100S SCSI	10ms	3.5"HH	$849/949
Quantum	32150 SCSI	8ms	3.5"LP	$849/949
Seagate	32430N	9ms	3.5"HH	$849/949
Seagate	32550N SCSI	8ms	3.5"LP	$959/1059
Micropolis	4221 SCSI	9ms	3.5"LP	$919/1019
3.0GB				
DEC	5300S SCSI	10ms	5.25"FH	$799/899
Micropolis	1936 SCSI	12ms	5.25"FH	$849/949
4.0GB				
DEC	5400S SCSI	12 ms	5.25"FH	$899/999
Seagate	15230N SCSI	9ms	3.5"HH	$1349/1449
Seagate	15150N SCSI	8ms	3.5"FH	$1449/1599
Micropolis	3243 SCSI	8ms	3.5"HH	$1349/1449
Conner	4207S SCSI	8ms	3.5"HH	$1349/1449
Quantum	3430/GP	19ms	3.5"HH	$1299/1399
9.0GB				
Seagate	410800N SCSI	11ms	5.25"FH	$2699/2799
Micropolis	1991 SCSI	11ms	5.25"FH	$2299/2399

WIDE SCSI DRIVE SPECIALS

1.0GB	Seagate	31230W SCSI Wide	9ms	$599
2.0GB	Seagate	32430W SCSI Wide	9ms	$999
2.0GB	Seagate	32550W SCSI Wide	Barracuda	$1099
4.0GB	Seagate	31523W SCSI Wide	9ms	$1799
4.0GB	Seagate	31515W SCSI Wide	Barracuda	$1859
9.0GB	Seagate	410800W SCSI Wide	11ms	$3089

SCSI CONTROLLERS

ADAPTEC
1542CF, ISA ... $165
2842 VESA ... $249
2742 EISA ... $309
2940 PCI ... $235

FUTURE DOMAIN
1670 ISA ... $85

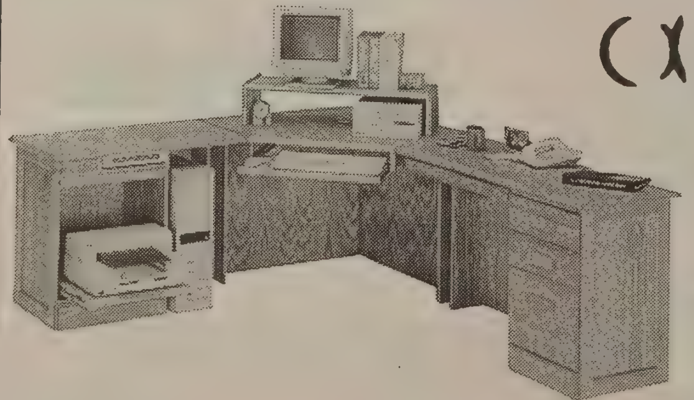
SUNJAK
7HD/2FD/IDE&IO All-In-One ... $85

TAPE DRIVES

CAPACITY	MAKE/INTERFACE	INTERNAL/EXTERNAL
250MB	WangDat/Archive SCSI	$400/500
525 MB	Wang Dat/Archive SCSI	$495/595
2GB	WangDat/Archive SCSI	$750/850
4GB	WangDat/Archive SCSI	$850/950
8GB	WangDat/Archive SCSI	$950/1050

- GOVERNMENT & CORPORATE PO's ARE ACCEPTED
- NO SURCHARGE FOR CREDIT CARDS
- SAME DAY SHIPPING ON MOST ORDERS
- RETURNS NEED TO HAVE RMA#'s
- SHIPPING AND HANDLING CHARGES ARE NOT REFUNDABLE
- PRICES AND AVAILABILITY SUBJECT TO CHANGE WITHOUT NOTICE

MasterCard VISA



ALPHA
FINE COMPUTER FURNITURE

Consider The Possibilities!

Let us tailor the perfect workstation for your multimedia needs

Left/Right End Units—12 Sizes!
Free Standing Corner Unit—3 Sizes!
10 Cabinet Configurations!

(800) 974—0277 • (510) 930-0277
2241 N. Main, Walnut Creek
Open M-F 9:30-5:30 Sat 10-5

Lifetime In-Store Labor Warranty On All Computers!

NORDIC COMPUTERS

Friendly, Knowledgeable Staff • Competitive Prices
Lifetime In-House Warranty on All Computers

Serving You Since 1985

GREAT PRICE

486DX4-100
VESA LOCAL BUS
w/Hard Drive & SVGA

- 486DX4-100, 3 VLB Slots
- 8MB RAM, 70ns
- 850MB IDE Hard Drive & VLB Controller
- 14" NI .28dp SVGA Monitor
- VESA Local Bus VGA Card
- Teac 1.44 Floppy Drive
- 2 Serial/1 Parallel Port
- Medium Tower Case w/7 Drive Bays
- Enhanced Keyboard
- Windows/DOS with Manual
- Mouse & Mouse Pad
- Lifetime Labor Warranty, 1 yr parts

850MB

$1549

#410BB

GREAT PRICE

90MHz
PENTIUM® SYSTEM
w/Flawless Processor

- 90MHz Intel Pentium® CPU
- 8MB RAM, 70ns
- 850MB Hard Drive
- Teac 1.44 Floppy Drive
- PCI Video Card w/ 1MB
- Enhanced Keyboard
- DOS 6.22 w/ Manual
- Lifetime Labor Warranty, 1 yr. parts

Monitor Sold Separately

$1949

#P90BB

MULTIMEDIA SYSTEM

MultiMedia
486DX2-80
Complete System

- 486DX2-80, 3 VLB Slots
- 2X CD ROM
- Sound Blaster 16 Sound Card
- 2 Speakers
- Encyclopedia + other titles
- 540MB Hard Drive
- 4MB RAM
- 14" NI .28 dp SVGA Monitor
- Enhanced Keyboard
- Windows/DOS w/Manuals
- Mouse & Mouse Pad
- Lifetime Labor Warranty, 1 yr parts

$1549

#M80BB

NETWORK HARDWARE • COLOR NOTEBOOKS

486DX2-66 System

VESA LOCAL BUS

- 486DX2-66MHz
- 3 VLB Slots
- 4MB RAM, 70ns
- 540MB IDE Hard Drive
- 14" NI .28dp SVGA Monitor
- VESA Local Bus VGA Card
- Teac 1.44MB Floppy Drive
- 2 Serial/1 Parallel Port
- Enhanced Keyboard
- DOS 6.22 with Manual
- Enhanced Keyboard
- Lifetime Labor Warranty
- 1 yr. parts

$1249

#464BB

486SX-33 System

VESA LOCAL BUS

- 486DX2-33MHz
- 3 VLB Slots
- 4MB RAM, 70ns
- 420 MB IDE Hard Drive
- 14" SVGA Monitor
- VGA Card
- Teac 1.44MB Floppy Drive
- 2 Serial/1 Parallel Port
- Enhanced Keyboard
- DOS 6.22 with Manual
- Enhanced Keyboard
- Lifetime Labor Warranty
- 1 yr. parts

$999

#4SBB

THE BEST COLOR NOTEBOOK

Patriot 4000

- 486DX2-66 CPU
- 4MB RAM exp. to 32MB
- 340MB Hard Drive with options to 800MB
- Color Display (Dual Scan) upgradable to active matrix
- Built-in Speakers, Sound Blaster Compatible
- 2 PCMCIA Type 2 Slots, or 1 Type 3 Slot
- Built-in trackball
- Docking Station Optional

$1895

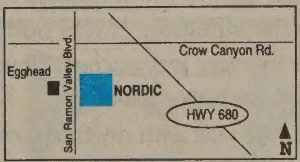
#4D6D3

NORDIC COMPUTERS

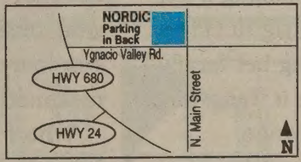
Prices subject to change without notice.
Dealer inquiries welcome.
Corporate, Government & Educational PO's Welcome.

VISA MasterCard

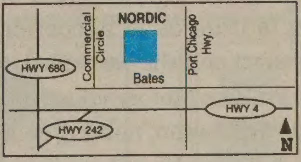
Pentium® is a registered trademark



SAN RAMON
2438 San Ramon Valley Blvd.
San Ramon, CA 94583
(510) 743-9390
M-F 9-6 Sat 10-4



WALNUT CREEK
1987 North Main
Walnut Creek, CA 94596
(510) 274-1725
M-F 9-6 Sat 10-4
Parking in back



CONCORD
560 Commercial Cir., Unit A
Concord, CA 94520
(510) 687-3050
M-F 9-6 Sat 10-4

DVORAK'S LAST COLUMN • BY JOHN C. DVORAK

Is Bill Gates Really Freddie Krueger?

Or

What Does The Future Hold With Microsoft In Charge?

I'm telling you in advance that the following report is not real, but a nightmare I had last week. For the life of me I couldn't figure out where the idea stemmed from, when I recalled a friend of mine telling me that he believed that Bill Gates was the Freddie Krueger of software. Relentless. Laughing.

It was 2006. I was driving my Gates 2000Ci to my birthday party at the luxurious Gates Hotel in Laguna Niguel. It seemed natural that the car I drove was Microsoft manufactured. Manufactured in Germany, that is. Some years earlier Microsoft bought the BMW company. And the hotel chain was once known as the Ritz-Carlton. It was natural to be sipping MS-Cola, once known as Pepsi and the new market leader over Coca-Cola. "We're going to sink Coca-Cola," I recall Bill Gates saying in a press conference. Coke sales rose after the comment but began a slow tedious more permanent decline after MS-Cola began to control the sales channel. Coke officials cried foul, but nobody listened.

The digital screen on my car was a touch screen and ran Windows 2000, the operating system that seemed to be everywhere. It was a pain sometimes, because when it crashed the ignition system of the car stopped and needed to be reset, stalling the car, sometimes in the middle of traffic or an intersection. Some old lady had this happen to her while making a left turn in front of an oncoming big rig (a Gates Highstar) and she was killed, forcing her family to sue Gates Motorwerkes. Because it was a foreign corporation, nothing could be done.

Jim Sikes, the old man married to the dead woman, went to Redmond City, Washington, where he became a one-man picket line in front of Microsoft's corporate headquarters. This lasted all of ten minutes as the local police beat the man senseless, supposedly for resisting arrest. The charge they tried to pick him up for was "spitting on Microsoft property" which turns out to be a felony in Washington State. The codger died a month later. The local Washingtonians applauded the man's demise, saying he got what he deserved. "After all, Microsoft employs people and he doesn't!"

In this dream I kind of rooted for Microsoft too. They were making life better for everyone. I changed my mind when I discovered through happenstance that Microsoft's project BOB II was intended to keep a dossier on every man, woman, and child in the continental US and Canada.

Miraculously, Mexico had somehow adopted OS/2 WARP 10 as the national operating system of choice and banned all Microsoft products including the cars, refrigerators, and washing machines. People went to Mexico to escape the tyranny that was all around me and that I couldn't recognize. The Canadians were the worst. Firmly in Microsoft's pocket, the goon squads were all recruited out of Canada.

By now one out of ten people was working for Microsoft. It was Microsoft Security that had most people worried. At my party there were two guys from Microsoft Security at the door checking identification. One just so happened to have my dossier. I didn't know this until a friend of mine, Samuel Jade, snatched it and showed it to me before the MS Security guys were aware of the situation. It was horrible. It was inaccurate in every way except a few, and I reckoned those were lucky guesses.

Where it did well was with my finances. Once Microsoft bought Chase-Manhattan in 2001 after trying to grab a piece of the international banking market, I knew there'd be trouble. Using its well-developed agent technology along with a database of credit card data and who-knows-what other sources, Microsoft put together an accurate profile of me and, I assume, most of the other people in the country.

I don't know why, but it seemed natural that Microsoft Security people were everywhere and checking ID's at the door. We all believed that software piracy was so epidemic that Microsoft Security was protecting us from that—and also the hackers. Hackers were in the news every day, and the public needed protection. Bill Gates volunteered his company's security people to help out. "We know more about this than anyone!" he proudly said.

My illusions were shattered in the middle of the party when a huge black bus pulled in front of the Gates Hotel and thirty or forty SWAT team creeps with weird badges that said MS-POLICE poured out of the bus and into the party. They formed a weird triangle in the room, each holding a baton saying "hut..hut..hut..hut" and moved forward.

I went up to one and looked into his dark glasses and before I could say anything he yelled, "Cindy Roan! Where is she?" Cindy Roan was a technology writer who was doing the definitive Bill Gates biography. She was in the news because an Air Force jet had accidentally crashed into her house because of some software glitch. Cindy was at the party and rushed out the back door. The creeps spotted her and took off in pursuit. I can't tell you what happened because I woke up as the Federal Express guy was pounding on my door.

Curiously, the next day I had another dream about Microsoft, but this one was about its bankruptcy. The second dream I found implausible, and woke myself up. ■

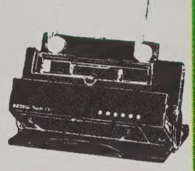
Copyright © 1995 by John C. Dvorak. All rights reserved.

HEWLETT PACKARD

IMAGING

HEWLETT PACKARD
Authorized Dealer

DeskJet 320
Portable Printer



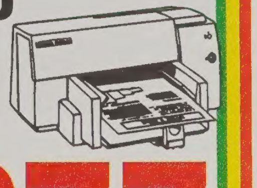
- Crisper, blacker blacks with 600 x 300 dpi printing plus HP's Resolution Enhancement Technology
- Compact, portable design fits neatly into a briefcase
- Easy-to-add color with an optional HP Color kit (sold separately) just snap in the cartridge and print

#1952331

$289

HEWLETT PACKARD
Authorized Dealer

DeskJet 540
InkJet Printer



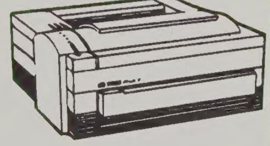
- Crisper, blacker blacks with 600 x 300 dpi printing plus HP's Resolution Enhancement Technology
- Easy-to-add color with an optional HP Color kit-just snap in the cartridge and print (Color Kit Sold Separately)
- Easily handles a wide variety of paper sizes

#1952342

$277

HEWLETT PACKARD
Authorized Dealer

LaserJet 4L



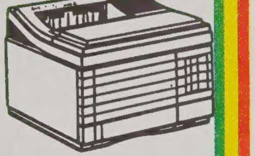
- 26 built-in scalable typefaces let you shrink and enlarge type to thousands of sizes.
- 300 DPI Laser printing with HP Resolution Enhancement Technology and microfine toner for smooth, sharp text and graphics.
- 1MB standard memory with Memory Enhancement Technology effectively doubles your printer memory.

#1786963

$488

HEWLETT PACKARD
Authorized Dealer

LaserJet 4 Plus



The BEST print quality in the industry

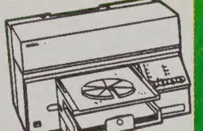
- 12 pages per minute engine and 25MHz RISC processor for faster printing
- True 600 dpi print quality for clear, crisp text and graphics
- Resolution Enhancement Technology and microfine toner for superior output quality
- Easy to set up and use
- Duplex option (sold separately)

#1908697

$1365

HEWLETT PACKARD
Authorized Dealer

DeskJet 1200C



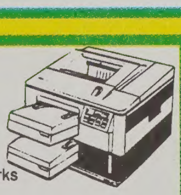
- 600 x 300 dpi black text at up to 7 pages per minute produces high-quality output at business speed.
- 300 dpi color at 1 to 2 minutes per page creates fast, high-quality output with bold, brilliant colors and true black.
- Plain-paper printing for both black and color saves money and allows convenient use of common office paper stationary.
- Built-in high-speed Centronics interface and optional HP JetDirect cards provide powerful, flexible connectivity.

#1786974

$969

HEWLETT PACKARD
Authorized Dealer

LaserJet 4Si



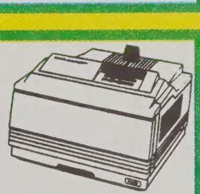
- Expandable and flexible, excellent for networks
- Fastest HP LaserJet printer at 17 ppm
- Multiple language capability with auto switching
- True 600 x 600 dpi printing with REt and microfine toner
- 75,000 page/ month duty cycle and flexible paper-handling
- HP quality and reliability

#1779583

$2839

HEWLETT PACKARD
Authorized Dealer

LaserJet 4V



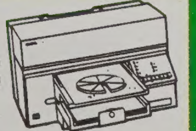
- HP's fastest desktop printer
- Crisp 600 x 600 dpi print quality
- 16-ppm engine speed
- 33Mhz RISCprocessor with I/O buffering for unparalled performance.
- Handles a wide range of paper sizes including 11 x 17.

#1952320

$1889

HEWLETT PACKARD
Authorized Dealer

DeskJet 1200C PS
For Mac & DOS



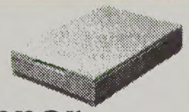
- 600 x 300dpi black text at up to 7 pages per minute.
- Postscript™ Level 2 Localtalk & PCL5 support.
- 300dpi color at 1 to 2 minutes per page creates fast, high-quality output with bold, brilliant colors and true black.
- Plain-paper printing for both black and color.
- Both Macintosh and DOS environment.

#1786985

$1529

HEWLETT PACKARD
Authorized Dealer

ScanJet 3P
Grayscale Scanner



- This small footprint home or office scanner includes software for graphic editing, OCR and software to emulate a copier on your home printer.
- 300 dpi
- 256 Grayscale

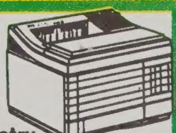
FOR PC
HP C2577A
#1957705
FOR MAC
HP C2579A
#1957691

YOUR CHOICE!

$469

HEWLETT PACKARD
Authorized Dealer

LaserJet 4M Plus



The BEST print quality in the industry

12 pages per minute printing for Macintosh and mixed Mac/Pc environments
True 600 dpi output • AdobeTM PostScriptTM Level 2 and enhanced HP PCL 5 printer languages.
80 scalable typefaces - 35 Adobe Type1, 35 Intellifont, 10 TrueType™
6MB standard, expandable up to 38MB, 250 sheet paper tray and 10-envelope multipurpose tray.
#1914571

$1849

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

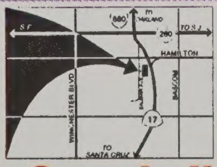
Fry's ELECTRONICS

Prices Good Through May 23, 1995

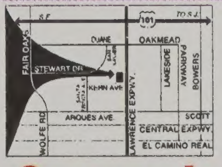
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

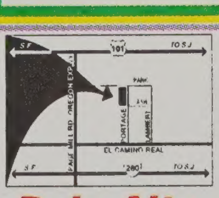
CORPORATE P.O. FAX #



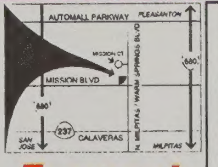
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595



Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6950



Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044



Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-9423

DISCOVER NOVUS
VISA
MasterCard

DISCOVER, VISA AND MasterCard ACCEPTED

Multimedia Systems

Supercom, your source for Intel processor based Touch™ systems with components that are built to last!

Multimedia Systems, System Upgrades & More!

System Processor

Pentium 100
Pentium 75
Pentium 66
486DX4/100
486DX4/75
486DX2/66

Multimedia Upgrades

ACER 2x CD-ROM
ACER 4x CD-ROM
16-bit Sound Card
25 Watt Speakers
80 Watt Speakers

Available with configured systems.

CD-Titles

Encarta 95
Grollier's
Animals
MS-Golf
MS-Money
MS-Works
Mega Race
CyberCade

More Titles

U.S. Atlas 4.0
Family Doctor
Dangerous Creatures
Dinosaurs
Mavis Beacon
ChessMaster 3000
World Atlas 4.0
and more!!!!

Sold with CD-ROM drives & systems.

Dangerous Creatures
Works
Encarta'95
Golf
Money

ACER CD-ROM Multimedia Bundles

Kit #1

ACER 2x CD-ROM
MS-Encarta '95

Kit #2

ACER 2x CD-ROM
MS-Encarta '95
MS-Golf

Kit #3

ACER 4x CD-ROM
25 Watt Speakers
16-bit Sound Card
Compton's Encyl.

Family Pack

ACER 4x CD-ROM
80 Watt Speakers
16-bit Sound Card
MS-Encarta '95
Dangerous Creatures
MS-Works
MS-Money
MS-Golf
Scenes Underseas
MS CD-Sampler

25 Watt Stereo Speakers

80 Watt Stereo Speakers

ACER Double & Quadspeed CD-ROMs

Acer®

Available with configured systems.

Multimedia Upgrades!

*Multimedia Kits and upgrades featuring **ACER Double & Quadspeed CD-ROMs***

Adaptec SCSI Kits and Controllers - PCI, VLB, EISA, ISA

Adaptec Kits	Bus Type
AHA-2940	PCI
AHA-2842A	VLB
AHA-2742AT	EISA
AHA-1542CF	ISA
AHA-1522A	ISA
AHA-1515	ISA
AVA-1505	ISA

Available with configured systems.

AudioEdge
The SCSI Master
PCI SCSI Master
The EISA SCSI Master II
The SCSI Direction
The VL SCSI Master
adaptec

Supercom

1-800-888-1888

Dealer/Volume Sales Only.
Call for the Dealer Nearest You!

The Intel Inside and Pentium Processor logos are registered trademarks of Intel Corporation. Supercom™ and Touch™ are trademarks of Supercom Inc. All other product or company names are the trademarks or registered trademarks of their respective owners. Configurations subject to change without notice.